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LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

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ENCEPHALITIS.*

GENTLEMEN,— Encephalitis consists in inflammation of that part of the cerebro-spinal axis which is contained within the cavity of the cranium. Although within the last few years considerable progress has been made in the study of inflammation of the brain, and within that period the science has made a rapid march, thanks to the labours of MM. LALLEMAND, ROSTAN, BOUILLAUD, and others, yet we are compelled to confess, that in spite of the know'edge which we have derived from these authors, our ideas on inflammation of the nervous centres are not yet very clear or precise. The difficulties that beset us in the study of disorders of the nervous system in general, are peculiarly great with respect to the brain, where inflammation of the nervous pulp is not characterized, in the same clear and decided manner, by the production of constant and unequivocal symptoms, as inflammation of other important organs, the lung, for example, or the abdominal viscera. The difficulty of appreciating the symptoms, so as to arrive at a precise knowledge of the seat of the lesion, is also increased by the circumstance that we cannot always separate easily the phenomena depending on actual inflammation of the cerebral substance, from the symptoms which accompany irritation or inflammation of the membranes. Hence a great cause of obscurity,— a result which, from the nature of the relation between the nervous pulp and its neurilema, it is often impossible to obviate. Besides, inflammation of the substance of the brain is not a disease so common of occurrence as you might be led to imagine from the accounts of certain authors. Encephalitis, as we understand the word, simple encephalitis, uncomplicated with any other disease, is, in reality, a rare affection. You may spend several months at the hospital without having occasion to witness a case: in short, inflammation of the substance of the brain or spinal marrow cannot be considered as a frequent disease, except by those who, too readily confounding similar appearances, have described every anatomical lesion of the cranial contents

* The present Lecture supplies a deficiency which exists in Lecture IV, published in our Number for Dec. 19. In order to secure the best position for hearing the Discourses of M. Andral, the gentleman to whose care the reporting of the lectures was confided, procured from the professor a special card of admission to the lecturer's own table, within the railed circle of the amphitheatre. But on the occasion on which the lecture on encephalitis was delivered, this precaution was neutralized by an unexpected influx of auditors, who, while they succeeded in gratifying their desire to place themselves close to the professor, and secure very comfortable seats, violated the rules of decency, and so crowded the seats set apart for the professors, that to report verbatim was not possible. Anxiety to publish the lecture with unquestionable accuracy, subsequently prevented us from giving place, in their proper form, to the brief notes then taken, but we now place before our readers a correct report of the lecture. It forms the commencement of M. Andral's discourse on encephalitis, and may, we believe, be read with as much advantage now as in an earlier number. The affair is simply one of transposition, which no foresight or precaution could have prevented, but which every care has since been taken to render immaterial to the perfection of the course.

under the name of "encephalite," or who denominate as "myelite," all acute lesions of the medulla spinalis.

Symptoms simulating Encephalitis.

To characterize inflammation of the nervous centres presiding over animal life, we must have a certain assemblage of symptoms, into whose particular history we shall presently enter in a manner calculated, as far as lies in our power, to render the subject complete. We say, an "assemblage of symptoms," for if the practitioner should found his diagnosis on one or two leading symptoms alone, delirium, or convulsions, for example, he may fall into the gravest errors. Thus we should avoid confounding with encephalitis the nervous symptoms which present themselves in the commencement or progress of an *enterite folliculeuse* (typhus fever), at the breaking out of an eruptive malady, and in the course of several other disorders. The greater number of children who have been cut off by an acute disease, present symptoms of disorder of the nervous centres, delirium, &c.; yet we find no reason for believing these nervous phenomena to be connected with encephalitis. The substance of the brain is healthy; we discover no trace whatever of inflammation within the cavity of the cranium, and are compelled to regard the accidents alluded to as the effect of sympathetic reaction.

Again, towards the termination of several chronic diseases, when the patient has been worn out by long-continued suffering, the nervous system is more or less disturbed, and we observe various cerebral symptoms, yet we are not qualified in attributing them to inflammation. This is frequently seen in cases of pulmonary consumption, where the patient becomes delirious and agitated a few days before death; yet the brain is rather less injected than in the normal state. The contents of the cranium are found in a condition of anemia rather than of hyperemia or inflammation, a circumstance which is certainly important in a therapeutic point of view. In typhus fever, whatever may be its form, no matter with what degree of intensity it may present itself, the nervous system plays an extensive part in the production of the functional derangements observable during life. There is disorder of the brain as well as disorder of the digestive tube, but we cannot affirm that inflammation necessarily accompanies or gives rise to the symptoms in either system. We may have a typhoid delirium without encephalitis, as we certainly may have a typhoid diarrhœa without inflammation of the mucous membrane of the intestinal canal.

A comparison of the functional disorders observed during life with the pathological lesions which anatomy reveals, places it beyond all doubt that the functions of the brain may be deranged, or even profoundly modified, without any inflammation of the nervous pulp. Thus, nervous traumatic delirium, the derangement of the intellect known by the name of "delirium tremens," &c., are not symptomatic phenomena of an internal cerebral inflammation; far from it; they exist in most cases with a discoloured state of the nervous substance. Instead of yielding to, they are aggravated by, sanguineous depletions, and are in many instances, as you all know, removed as it were by enchantment, under the influence of opium in elevated doses, a remedy which is fatal in inflammation of the brain.

Encephalitis, or inflammation of the contents of the cranium (meninges excepted), differs in several respects, according as different parts of the brain may be affected: it also varies according to the degree of intensity with which inflammation may exist: hence there are

Various Distinctions of the Disease.

In relation to the first head, we may subdivide it into three species. *First;* Inflammation of the cerebral hemispheres *Second;* Inflammation of the central medullary parts, viz., the septum lucidum, fornix, and inferior part of the centrum ovale. *Third;* Inflammation of the cerebellum. Again, with respect to its intensity, encephalitis may be distinguished, like many other inflammations, into acute and chronic encephalitis. Acute encephalitis may be general; the whole mass of the nervous centres being attacked at the same time; but this extensive disease is excessively rare: it may be partial, confined to a small portion of the nervous substance; this is much more generally the case One hemisphere of the brain may be attacked, while the other remains free from any inflammation, or only a small portion of the hemisphere may be implicated in the disease; in a word, encephalitis, like congestion, may occupy any part of the cerebral mass. We explained fully the varieties of degree and seat, when treating of cerebral hyperemia, it is unnecessary therefore to repeat details into which we have already entered.

I have distinguished inflammation of the brain into three divisions, according to the seat of the affection, viz., inflammation of the hemispheres of the cerebrum; of its central white parts; and, finally, inflammation of the cerebellum. This is a necessary distinction when we come to speak of symptoms; however, as the anatomical characters are the same, no matter what point of the nervous centres may be the seat of the disease, we shall now proceed to sketch a general view of the morbid anatomy of encephalitis.

Anatomical Characters.

These, as we have just said, are invariable, whether the inflammation may

occupy the convolutions, the deeper parts of the cerebrum, the mesocephale, or the substance of the cerebellum. The first and most remarkable character is an injection, more or less well marked, of the cerebral pulp. The gray and white substance evidently receives more blood than in the normal state; it is more red than natural, tumefied, and sensibly more firm, than in a healthy brain; these appearances are, as you see, also common to congestion. Can we distinguish, with any degree of certainty, whether this abnormal injection is in fact truly inflammatory, or dependent on a simple hyperemy of the cerebral substance? No; simple congestion cannot always be distinguished from this, the first stage of inflammation; it even passes, by insensible degrees, into the latter, and it is often quite impossible to say where the congestion ends, and the inflammation commences. This is not peculiar to the brain, although it is, perhaps, more difficult to distinguish the two lesions, of which we now speak, in the brain than in any other organ. You will find the same difficulty of separating the two conditions in thoracic affections. How often are we at a loss to decide whether a portion of lung is simply engoué and congested, or actually inflamed! The abnormal coloration, which distinguishes the first stage of cerebral inflammation, is very various in degree. Sometimes the injection is bright, and the small vessels are excessively distended, even so far as to allow here and there effusion of blood in small quantities, which we find disseminated through the inflamed mass. In other cases the injection is less striking, and when the nervous substance is sliced off, we merely observe a greater number of bleeding points than usual; in short, the colour may vary from a deep red to the most delicate rose. However the injection may vary in different cases, we never find this anatomical character alone; thus the nervous substance sometimes presents a kind of tumefaction depending on the increased afflux of blood to the part; and this turgescence may be carried to such a degree, as sensibly to augment the volume of the cerebral hemispheres: this is a circumstance well worthy of attention. The nervous pulp, submitted to the effects of an irritating cause, becomes tumefied with wonderful rapidity; and the cerebral hemispheres, too large for the inelastic osseous case in which they are contained, become pressed upon, and various accidents manifest themselves, depending more on this compression of the nervous substance than on its irritation. This is the reason why the brain constantly tends to escape from the cavity of the skull, and form a hernia externally, whenever inflammation of the nervous pulp coincides with an accidental opening in the osseous parietes. Hence also, when we remove the skull-cap, we frequently observe that the diseased hemisphere is evidently more developed than the one on the opposite side, to which irritation has not attracted an increased quantity of fluid. The convolutions appear pressed closely against one another, packed as it were too tightly in the cranium, and the surface of the brain no longer presents the anfractuosities by which it is so characterized in a normal state. The inflamed hemisphere, tumefied in all points, and increased in volume, tends to occupy more space than it should do, encroaches upon the opposite portion of the brain, and thus produces a variety of accidents all depending on mechanical pressure.

In the early state of inflammation, the cerebral substance has probably already acquired a tendency to become disorganized; however, the only lesions we observe, are the two just mentioned, injection of the nervous pulp, with tumefaction, and a slight increase of the normal consistency; but when the inflammation has lasted for a certain time, we observe characters of a less equivocal nature. The inflamed nervous tissue undergoes a change of consistency. It has lost much of its resistance, is soft, and gives way under the least pressure. This is a general law of pathological anatomy, affecting all organs as well as the brain; hence ramollissement, or softening of the brain, may be an effect of inflammation, and when it is the consequence of acute inflammatory action, the ramollissement is always accompanied with more or less injection of the cerebral substance. In chronic inflammation of the nervous pulp, we also have more or less ramollissement, but instead of congestion, or increased vascularity, we generally find an infiltration of purulent matter which has broken down, and, as it were, dissolved the cerebral substance. Acute inflammation of the brain may also terminate by suppuration; indeed, we may say generally, that every inflamed tissue has a tendency to generate pus, and that the brain is not exempt from the general law. Hence the presence of a purulent fluid is one of the best proofs we can have that inflammation has actually existed in the nervous tissue, abstraction being made of certain rare cases where its presence in the brain results from what has been called "abscess by metastasis."

The pus exists at first in the form of infiltration; the cerebral substance is then intermixed with a quantity of purulent secretion, which every day renders more and more friable, soft, and at length almost liquid. In proportion as the disease advances (if the patient happens to survive the first stage), the molecules of purulent fluid become united into one mass, and form a true abscess; however, encysted abscess results much more frequently from chronic than from acute inflammation of the cerebral substance. Sometimes the le-

sion is confined to a single point of the brain, and we find only one abscess; at other times, various portions of the hemispheres contain circumscribed collections of pus. Ulceration is another form by which inflammation of the different organs may terminate. Do we observe this in the brain? Yes; the observations of SCOUTTITEN and ABERCROMBIE leave no doubt but that inflammation of the nervous pulp may give rise to ulceration of the brain; but the disease is one extremely rare.

The existence of gangrene is by no means so well established. It seems, on the contrary, doubtful that this termination of inflammation has ever been observed in the brain, although cases have been reported in the "Memoirs" of the old Academy of Surgery, and M. LALLEMAND has described one in his excellent treatise on "Diseases of the Brain." But the lesions we have now mentioned, are not the only ones which may present themselves in connection with inflammation of the cerebral substance. In a great number of cases the membranes become engaged in the disease, and are inflamed in the same way as the pleuræ so often inflame when the pulmonary tissue is attacked by pneumonia. It is this affection of the meninges which produces the various morbid effusions of pus, serum, or a sanguineous fluid, that we frequently find between the membranes, or in the ventricular cavities, and which give rise to important modifications in the symptoms of this disease.

Having thus briefly pointed out the leading anatomical characters of encephalitis, let us turn to a consideration of the

Causes which may produce Encephalitis.

These are often the same as the causes of congestion, for the one may pass rapidly into the other; however, there are certain influences that act more specially in the production of encephalitis. In the first rank, we must place external violences applied to the region of the head,—an order of causes, be it remarked, that plays but an insignificant part in the production of cerebral congestion. Thus blows, falls, &c., in a word, any severe injury of the head, may give rise to the development of inflammation within the cavity of the cranium. It is not necessary that the external violence be applied immediately to the head: in some cases a severe fall, even when the individual has alighted on his feet, is sufficient to produce a commotion of the whole body, to such an extent, that the brain suffers a kind of concussion, which at first seems of little consequence, but sooner or later is followed by true inflammation of the cerebral substance. Wounds of the head may be accompanied or not with a breach of continuity. In the former case, the solution of continuity affects the bones of the cranium, or merely the soft parts which cover the osseous parietes, and it is by no means rare to see encephalitis developed in consequence of a simple wound of the hairy scalp. There are other cases where the bones, examined externally, appear perfectly sound and intact, but the internal table of the cranium is fractured, and the periosteum more or less injured, and inflammation extends from the membranous lining of the skull to the substance of the brain.

Sometimes encephalitis is produced by the action of foreign bodies, either blunt or pointed, by projectiles, &c., which are lodged in the nervous pulp. A projectile, by its rapid passage through the cerebral substance, may determine inflammation, without remaining in the brain. At other times the foreign body remains there, and the nervous pulp immediately surrounding it, irritated by its presence, takes on an inflammatory action. However, these different bodies are far from producing in all cases an immediate effect. It is not rare to see them remain for a certain length of time in the brain, before they give rise to any inflammatory symptoms. Thus, in some cases a musket-ball has remained several months in the midst of the cerebral substance without producing any accident whatever. At a later period, well-marked symptoms of encephalitis manifest themselves, death ensues, and on examining the brain, we find the projectile surrounded by an abscess, the effect of inflammation.

We may discover the cause of encephalitis in certain chronic affections of the brain itself. Thus in some cases an apoplectic cell becomes a cause of inflammation, acting on the same principle as a foreign body, and exciting irritation, or true inflammation, in the surrounding nervous pulp. Various accidental productions have a similar influence, and should be ranged under the same category,—cancerous tumours, for example, scrofulous tubercles, especially in children who are at the same time affected with tubercular disease in the other great cavities; inflammation becomes developed around those tubercles; in many cases, indeed, it is chronic, and gives rise to few well-marked symptoms, but in others the inflammation is positive, acute, and terminates the patient's life, for death here cannot be attributed to the presence of tubercular masses in the centre of the nervous system, for these masses existed perhaps for years, without producing any grave accidents. It is to inflammation that we most attribute the fatal result, and, accordingly, we find a greater or less portion of the nervous pulp round the tubercle, injected, softened, and infiltrated with the pus.

Amongst other causes of encephalitis, we must not forget to mention acute or chronic lesions of the membranes enveloping the brain; thus, for example, tubercles are fre-

quently deposited in the substance of the pia mater; as they become developed, they penetrate into the substance of the brain, irritate the convolutions, and by their presence determine inflammatory action, exactly in the same way as any other foreign body in the brain.

We must also reckon amongst the causes of encephalitis, certain affections of the bones of the skull, as caries, exostosis, &c.; and amongst the bones commonly diseased, we may mention the petrous portion of the temporal bone as one most frequently affected with caries; hence the reason why children subject to purulent discharges from the internal ear, are so often attacked, in the end, with inflammation of the brain.

Gentlemen, you all know that the nervous expansions distributed to our several organs of sense, communicate directly with different masses of the cerebral substance; hence it is not irrational to expect that irritation or inflammation of the sentient extremity of the nerve should produce a corresponding lesion of the central organ; this is fully confirmed by experience. Thus, with respect to the causes furnished by lesions of the organs of sense, we have to point out,—for the eyes, ophthalmiæ, especially the internal ones, as a violent iritis &c.; for the ear, inflammation of the labyrinth and internal parts; even inflammation of the middle chamber is not without some influence on the production of cerebral inflammation; for the organ of smelling, inflammation of the nasal fossæ, particularly when it extends upwards to the frontal sinuses; it is not an uncommon thing to see an intense and mortal inflammation of the brain develop itself after the extraction of a benign or cancerous polypus of the nasal fossæ. For the skin, inflammation of the integuments of the face, of the scalp, the different forms of erysipelas which so frequently attack these parts, may determine inflammation of the brain. However, you are not always to conclude that if a patient labouring under erysipelas of the face be seized with agitation and delirium, he must of necessity have inflammation of the brain. This delirium is, certainly, in many cases, connected with a disease of innervation, independent of inflammatory action, and is merely a sympathetic phenomenon; however, in the uncertainty which reigns, it will perhaps always be more prudent to act as if encephalitis really did exist; antiphlogistic measures cannot here produce any evil result, while their neglect may give rise to fatal consequences.

Lesions of the great nervous trunks are sometimes a cause of encephalitis. M. BOUILLAUD mentions a case of this kind; a strong ligature had been applied round the brachial plexus; this determined an excessive pain in the part, which ascended along the traject of the cervical plexus, and at length terminated in the symptoms of cerebral inflammation. There is no organ of the body whose inflammation may not occasionally become an exciting cause of encephalitis, so intimately are the nervous centres connected with all normal phenomena of the living body, and so readily are they influenced by every derangement of structure or function in each part of our system. However, we must again warn you against the danger of generalizing this proposition too extensively,—against the error of believing that every derangement of the nervous centres which manifests itself during the course of acute or chronic inflammation, depends upon actual inflammation of the brain itself.

The act of dentition in children is sometimes an exciting cause of encephalitis; irritation is propagated from the nervous pulp of the tooth to the central organ; however, we may remark, that congestion is more frequently the result produced by difficult dentition than true inflammation of the cerebral substance. Finally, in relating a history of the causes of encephalitis, let us observe that it may originate in over-action of the brain, the organ of intelligence; thus we have many examples on record, where this disease has been developed under the influence of excessive intellectual labour, of violent passion, and acute moral affections.

ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON A CASE OF

ASCITES AND ANASARCA, WITH DISEASE OF THE LIVER AND HEART,

DELIVERED IN THE SESSION OF 1836.

BY DR. ROOTS.

MARY ANN VAN HAGAN, aged 43, was admitted on the 9th of July last. She states that twenty-seven years ago she had a severe attack of rheumatism, and well recollects at that time having suffered pain in the region of the heart, ever since which she has had a feeling of great oppression about the end of the xiphoid cartilages, and has suffered dyspnœa, upon exertion, from that time. She has felt at times acute pain in both hypochondria, extending to the scapulæ, and she has several times had jaundice. Three years before she came into the hospital, she states that her belly began to enlarge, and her legs to swell, but that these symptoms disappeared in about a month, without resorting to medical aid. The cata-

menia ceased when she was 40 years of age, and have not since returned. From that time, two years and five months before she came into the hospital, she ceased to be dropsical for seven months. Her belly then (two years and five months ago) began to enlarge, and in six weeks became as big as it was at the time of her admission here. The legs too became very œdematous very quickly after the belly began to enlarge, and they so continued from that period up to the time of her admission, when the report of her state was as follows:—The legs are very much swollen, and pit on pressure. Some of the veins are varicose; the abdomen is very much distended, and tense, and the parietes are œdematous; fluctuation is, at the same time, very distinct throughout the whole of the abdomen, and there is also some tenderness on pressure. Her countenance is pallid and anxious, her lip rather livid, the tunica conjunctiva of the eye tinged with bile, her tongue slightly coated with a white fur, posteriorly and in the centre, and but slightly red at the tip and edges. She complains of considerable thirst, and has some nausea, and occasional vomiting. Her bowels, she states, are open. According to her account she passes two or three motions of a natural appearance daily; urine scanty and slightly albuminous. Her respiration is laboured, and thirty in a minute, accompanied by some cough. She also has some expectoration of thick mucus; her pulse 88, rather small, easily compressed, irregular, and intermittent. On applying the stethoscope to her chest, mucous and sibilant rattle were distinctly heard over the different sides of the chest, on either of the superior portions, whilst the respiration was indistinct, and the resonance very dull on percussion at the lower part of both sides. Upon examining the heart, that organ was found to beat over rather a larger space than natural, and there was also some heaving and a dwelling of the organ against the parietes at each systole of the ventricles. The natural sound of the heart was deadened, and the state of the pulse, as you might expect, was irregular, and it was occasionally intermittent. There was, at the same time, a loud bellows sound distinctly heard at each systole. At first this bellows sound,—which, I confess, was not, perhaps, examined with sufficient accuracy in the first instance, or perhaps it was lost in the sibilous state of the bronchial tubes,—at first it was thought to be only single, but very shortly afterwards it was discovered that the bellows sound was double.

For the first six days after her admission into the hospital she was placed upon milk diet, and the effect of diuretics was tried. These diuretics consisted of digitalis, squills, acetate of potass, the decoction of taraxacum, with some spirit of nitric ether occasionally, and, at the same time, an occasional purgative of compound powder of jalap was given. At the end of a week no decrease of the symptoms had taken place, and as I was quite sure that such an immense body of fluid was not likely to be absorbed, the kidneys remaining still indolent, I considered it right to direct the operation of paracentesis to be performed. Accordingly she was tapped on the 15th of July, and twenty-five pints of a yellowish serous fluid were drawn off. It was after the drawing off of this fluid that the double bellows sound became considerably more distinct, perhaps, than it was before. Apparently no peritoneal inflammation followed the operation, but we were enabled to ascertain, as soon as the operation had been performed, that the liver was considerably enlarged. There was reason before to believe that the liver was diseased, because, upon percussion over the region where you might imagine it would project if enlarged, there was throughout so much duller a sound on percussion than natural, that I did not hesitate immediately upon her being taken into the hospital to write upon her ticket—"ascites et anasarca, morbus hepatitis, et morbus cordis."

After the tapping, I thought it right to try mercury in conjunction with some diuretic. I therefore ordered her three grains of blue pill, one grain of powdered squill, and half a grain of digitalis, to be taken three times a day; and she was also directed to resume the nitrate of potash, the spirit of nitric ether, and the decoction of taraxacum. Under this treatment, for the first ten or twelve days, there appeared to be some improvement; the mouth became sore, the kidneys secreted more urine, the legs were much less swollen, and the breathing was freer. In conjunction with the above plan of treatment, diminishing the quantity of mercury, and merely just sustaining its influence, the iodine ointment was directed to be rubbed in over the abdomen, in the proportion of a drachm of iodine to an ounce of lard, night and morning, a drachm of such compound at each friction. This, however, produced much irritation of the skin, and distressed her considerably, it was therefore omitted, and she was directed to rub in instead the ung. potass. hydriod. She went on pretty much in the same way, I should say of improvement, from after the tapping had taken place, to about the end of the first week in August, when the belly again began rapidly to fill, and I wished to try small quantities of elaterium. I accordingly directed the twelfth of a grain of elaterium to be given, with a drachm of spir. nit. ether. every six hours, but this dose proved too active, producing great pain in the abdomen, purging her very violently, and exhausting her powers too much. It was immediately reduced to the twenty-fourth of a grain, and even in this diminished

quantity it acted too violently. It was then lessened to the thirtieth of a grain, and even that acted more on the bowels than she could bear, and ultimately it was reduced to the fortieth of a grain, still in combination with the nit. ether, given every six hours. It then acted mildly on the bowels, but no increase of urine followed its use. Some dandelion was next given, in conjunction with the fortieth of a grain of elaterium every six hours, a pint of the decoction of taraxacum being directed to be taken daily. However, by the end of August, she was as large as before, although her general health seemed somewhat better than when she was admitted.

On the 3rd of September she had become so large, and suffered so much inconvenience, that it was again determined to perform the operation of paracentesis, and Mr. SOUTH, who operated on the previous occasion, operated also now, but only three pints of a somewhat ropy fluid were withdrawn, and there appeared to be at last, after the flow had ceased, some substance pressing against, and entirely closing the orifice of the canula, which was withdrawn, an elastic hollow bougie being passed in instead, but with no better success. A small quantity of blood escaped from the wound.

Now, after this second tapping, freely applied, peritonitis supervened, and was met by the ordinary treatment,—leeches, so long as there was excessive tenderness over the abdomen, and calomel and opium, given until the mouth was again sore. When the inflammatory action had subsided, palliative treatment merely was again had recourse to, and she returned to the use of digitalis, nit. ether, and the taraxacum. Still, however, there was, from time to time, pain in the abdomen, which rendered it necessary, when the mercury was left off, to recur to leeches,—even so late as the 2nd of October, soon after which time she became gradually worse, the dropsical symptoms rather increased, the dyspnœa became more violent, attended with excessive palpitation, the pulse excessively feeble, the extremities cold, and the general debility so great that it was absolutely necessary to resort to stimulants of almost every description,—wine, brandy, ether, porter, ammonia; and as there appeared to be periodical spasmodic attacks of dyspnœa, Mr. STONE, or Mr. WHITFIELD, prescribed some ethereal tincture of lobelia inflata, which considerably relieved her, and this she continued to take up to the time of her death, in somewhat increased doses; so that I think at last she took as much as 16 or 18 minims of the tincture three or four times in the twenty-four hours, in conjunction with, perhaps, a drachm to each dose, of the spt. æth. sulph. comp. This treatment produced only very partial and occasional relief, and she died on the 15th of November, somewhat more than three months from the time of her admission.

Now with respect to the *diagnosis*. There was no doubt whatever that general dropsy existed, with effusion into the peritoneal cavity, and an anasarcous state of the extremities and trunk. Her face was occasionally swollen, the lip somewhat livid, the tunica conjunctiva suffused with bile. The dulness on percussion over the region of the liver, indicated disease of that organ,—its enlargement after the tapping proved this to be the fact. The occasional pain in the abdomen evidenced that chronic peritonitis had existed. The mucous, sibilant, and sonorous sounds in the chest, showed chronic inflammation of the bronchial tubes. The entire absence of clear respiratory murmur at the lower part of the chest, and the dulness on percussion on either side, indicated effusion. The stethoscope made the disease of the heart equally clear; I was quite sure that the left ventricle, and, indeed, I believed that the whole heart was enlarged, for it beat over a greater space than usual, as proved by its prolonged impingement against the parietes of the chest. The parietes of the heart and the left ventricle were shown to be increased, by the deadened sound of the heart. I believed disease of the valves to exist, in consequence of the bellows sound. I remember remarking, before hearing the double bellows sound, to some gentlemen present, that, in consequence of the intermittent pulse, I believed the mitral valve was the seat, more especially, of the valvular disease. Indeed, according to my own experience, whenever there is sufficient disease of the mitral valve to prevent it from thoroughly closing the orifice, you have more or less intermission of the pulse, which I do not find to be necessarily the case where there is merely disease of the aortic valves. When I heard the double bellows sound, it did not at all alter my opinion with regard to the disease being seated in the mitral valve; on the contrary, it seemed rather to be strengthened, for I conceived that some impediment existed to the flow of blood from the auricle which gave the first sound, and that when the ventricle contracted, a portion of the blood regurgitated into the auricle, and thence probably arose the second sound.

With respect to the *prognosis*, it was quite clear, from the state of the heart, and the presumed state of the liver,—a state which had existed more or less for three years, and especially for two years and five months,—that recovery was not to be expected. One could only attempt to relieve her to some extent, and for a time we succeeded. But now comes a curious point, which renders this a most interesting case as regards the diagnosis, because such a thing is as likely to occur in private as in public practice, where it would excite a good deal of observation,

and perhaps some animadversion. I was quite certain,—the fluctuation was so evident,—upon first examining the patient, that very considerable effusion existed in the peritoneal cavity,—that there was ascites. At the first tapping twenty-five pints of fluid were withdrawn, and when she again became nearly as large as before, and was tapped a second time, only three pints came away. And why not more? Why, because some of the fluid must been have contained in a cyst. But that would seem to contradict my diagnosis. Was I wrong? Had I mistaken ovarian dropsy for dropsy into the peritoneal cavity? I was quite sure that I had not committed this error, though there might be an ovarian cyst containing fluid, as well as fluid in the peritoneal cavity.

The *post-mortem examination* I think solved the difficulty. Long-standing slight adhesions existed at the upper portions of each lung. The right side of the chest contained about two pints of fluid, the left, about a pint, containing no flocculi, and not at all tenacious. The lungs crepitated in almost every part, but they were very considerably congested, almost throughout, but in the very centre of the most congested parts there were small portions of the lung which were perfectly natural. The bronchial membrane presented chronic inflammation, but no mucus. The whole of the heart was enlarged; the serous surfaces of the pericardium were perfectly adherent, and both auricles were found considerably dilated. The right ventricle was of its natural size, the cavity of the left was somewhat diminished, and its walls were considerably hypertrophied. This exactly corresponded with the state of her pulse. There was none of that violent hammering stroke which would have attended a dilatation of the ventricle equal to the hypertrophied condition of its walls. The lining membrane of the left auricle was opaque and whitish, throughout almost the whole extent, excepting a portion at its posterior part of about the size of half-a-crown, which was redder than natural, and upon which there were small patches of abrasion or ulceration. The greater portion of the lining membrane of the left ventricle was also opaque, and whitish, more especially near the aortic valves. The tricuspid valve was not changed. The left auricular opening, when viewed from the auricle, resembled a small semilunar chink, rendering the action of the valve imperfect, and this opening was but just large enough to admit the point of the little-finger, which then felt an osseous or calcareous deposit. The other portions of the mitral valve were indurated, and converted into almost cartilaginous substances. The aortic valves were thickened and uneven, but still were capable of effectually performing their functions, and in the lining membrane of the aorta there appeared to be several depositions of atheromatous matter in small patches.

Immediately upon opening the abdomen, a considerable portion of serous fluid escaped. There was fluid also in the peritoneal cavity. The liver, the stomach, and the omentum, were adherent to the abdominal and costal parietes, and were attached, partly to the upper arch of the colon, and partly to some of the superior convolutions of the small intestines. Now there also adhered slightly to the abdominal parietes, and the under portion of the arch of the colon, a dense, smooth, pellucid membrane, about three times as thick as ordinary serous membrane, which, passing in front of the small intestines, appeared to be attached to the brim of the pelvis and pubis, extending laterally on each side of the line, forming a sac, or pouch, filled with serum. On a more minute examination, Dr. Barker found that this false membrane passed over the bladder and uterus, between it and the rectum, and was then reflected upwards, posteriorly, and, passing over the lower portion of mesentery, joined the upper portion of the membrane, where it was attached to the colon. Much of this was capable of demonstration, but it could not be completely traced to the arch of the colon. The convolutions of the small intestines adhered slightly, forming numerous small sacs, filled with fluid. The serous membrane was white, and so thickened, in many places, as to resemble cartilage. The liver, which was much enlarged when cut into, was of a brownish-red, mottled with spots, here and there, of a yellowish brown, and very much indurated, but it did not break down on pressure. The gall-bladder was very small, but contained bile. The spleen was somewhat enlarged; its peritoneal coat was quite as much thickened as, or perhaps more than, that of the liver, and granulated, and, when cut into, the spleen was somewhat darker, and much firmer, than natural. The kidneys I did not think presented any evidence of disease, although from first to last the urine was more or less albuminous. The ovaries were somewhat enlarged.

The liver [*presenting it*] is considerably enlarged, and exhibits that mottled and hypertrophied condition which is frequently observed in intemperate people. This woman had drunk much. Its peritoneal surface is exceedingly thickened; the result of chronic inflammation, and so hard, that the point of my finger will not break through its surface unless I use my nail. You would expect, that with such a liver some bile would be absorbed into the system, and thus account for the yellowness of the conjunctiva.

I said that the pericardium was universally adherent. I have always told you that I am not ashamed to confess my own ignorance

openly, and now I am about to confess that I know of no symptom, general or local, by which you can positively say that total adhesion of the pericardium has taken place. If you place your little-finger in the opening of the valve from the left auricle, you will feel the bony or calcareous deposition which I mentioned, and, viewing the valve from the ventricle, you will see it is so contracted there, as scarcely to admit of the point of the finger, though it can be passed farther in that direction than from above. There is a sort of triangular or semilunar pouch, which, from the thickening of the valve, renders it impossible for the valve to close perfectly. What has been the cause of this? Why it is the result of inflammation of the pericardium most probably following the attack which she had two and a half years ago, as she well recollected having suffered pain in the region of the heart at that time, and ever since has experienced great uneasiness and a sense of depression at the xiphoid cartilage, with dyspnœa. She then had pericarditis, which of course ended in adhesion, and hypertrophy of the left ventricle; at the same time there was, no doubt, as most frequently is the case in acute pericarditis, inflammation of the internal lining of the heart. With such a state of the heart and valves, it can be no matter for surprise that the patient was the subject of bronchitis, effusion into the chest, and general dropsy. These are only the necessary consequences of such an impeded circulation.

The double bellows sound was, I believe dependent entirely upon the condition of the mitral valve. The aortic valves had not I think, any connection with it. There must have been two impediments to the uninterrupted flow of blood from the auricle into the ventricle,—the very narrow opening, and those projecting osseous or calcareous deposits just within; either cause being quite sufficient, in my mind, to produce the first bellows sound. Then the valve being unequal to close the aperture entirely, as soon as the ventricle had received the blood, and attempted to expel it into the aorta, a portion, it is true, would go into the aorta, but a portion would necessarily regurgitate into the auricle, whence, I believe, originated the second bellows sound.

With respect then to the reason why the fluid was not freely evacuated from the abdomen on the second tapping, I can only account for it this way. Mr. South tells me that the two openings were perfectly parallel; exactly at the same height, but that he discovered afterwards that he had not in the first operation made his opening in the linea alba, but a little to the left side of it; in that case the whole, or nearly as much fluid as is ever drawn off by tapping, was evacuated. In the second instance he did tap in the linea alba, but only three pints of fluid substance came away. Something was felt pressing against the canula. Now it would almost seem as though this was the result of inflammation, but it is quite certain, from the size of the membrane which I have described, and from its density, that that membrane was not the result of inflammation between the two tappings. In the first tapping it is probable that there was a larger quantity of fluid than in the second. If the sac existed in the first instance (at the first tapping), and it was a perfect *cul de sac*, why did so much more fluid come away on that occasion? Why there must have been a less quantity effused into the abdomen at the second tapping, and perhaps some alteration in the position allowed the small intestines to press a portion of the sac against the orifice of the canula, and so prevented more fluid from coming away; for the moment the knife was plunged into the peritoneal cavity at the post-mortem examination, a large quantity of fluid escaped. I can only suppose that the pouch was not perfect, but had a communication with the general peritoneal cavity, and that in the first operation the part in which the opening was made, favoured the discharge of all the fluid. Then some circumstances occurred by which the position of the sac was changed; perhaps the bowel fell down a little, and caused pressure against the canula. As two or three pints were drawn off, a portion of the cyst would collapse, and might be driven against the orifice, and when the hollow bougie was passed, the same result may have taken place. It is quite clear that this sac must have existed at the first tapping, and that a regular organized membrane of such immense thickness could not have been formed between the two tappings. The circumstance reflects not in the slightest degree upon the operator. The same thing would have happened to any body. In point of fact, if it reflected upon any one, it was upon me, for my diagnosis, because I had asserted that she was suffering under ascites, that is, I felt confident that the fluid was contained in the general peritoneal cavity. The result of the first operation showed that I was right, but the second proved the existence of a cyst, as well; therefore, I was both right and wrong,—provided the cyst did really exist prior to the first operation,—did exist, I mean, as a perfect cyst, or a *cul de sac*,—without any communication with the rest of the peritoneal cavity.

ON THE

MORTALITY OF INFANTS IN ENGLAND.

By T. R. EDMONDS, *Esq., B.A., of Trinity College, Cambridge.*

THE very great diminution of the mortality of infants in England is one of the most remarkable phenomena of modern times. The existence of this diminution is established upon principles universally acknowledged as true by all ancient and modern authorities on the subject of human mortality. It is, however, highly desirable that an extraordinary fact of this nature should be confirmed by a different, though not a more correct, method of investigation.

Public opinion is at present divided between two tables of mortality, the "Northampton" and the "Carlisle." The public appears to have adopted these tables as true, and to have believed them applicable to the English population in general, after their respective authors had ceased to believe so themselves. According to the Northampton Table, out of 100 born, 46.4 die before they complete their fifth year; and according to the same table, out of 100 constantly living under the age of five years, 14.2 die annually. According to the Carlisle Table, thirty-two die under five years out of one hundred born, and 8.2 die annually for every hundred living under the age of five years. In all England and Wales, during the eighteen years 1813-30, there died of females only nineteen under the age of five years out of one hundred born, and 4.6 annually out of one hundred constantly living under the age of five years.

If the number of the dying at annual intervals, under the age of five years, be known (as is the case in England), the law of mortality at this portion of age may be determined equally well in two ways, either by observing the number of births, or by observing the number of the living under the age of five years. If the relation of the dying to the living be given, the relation of the dying to the births is also given, and reversely. The English returns supply us with both these relations, which reciprocally confirm one another. I have already stated for each county of England the number of deaths under the age of five years, which occur annually for every 100 constantly living under the age of five years. I have now to exhibit the number which die before they complete their fifth year out of every hundred born.

In the English population returns are stated the number born in each country during the eighteen years 1813-30, and also the number dying under the age of five years during the same time. If there were no deficiencies in the registered births and deaths, the number dying under five years out of 100 born would result immediately from dividing the latter by the former number (neglecting a small correction, not exceeding two per cent., due to the births having been progressively increasing). The result thus obtained will be correct, even if the deficiencies are very considerable, provided that the proportional deficiencies in the births and in the deaths are the same. If the proportional deficiencies are not the same, the apparent may be reduced to the true result, by means of a small correction, respecting the amount of which there is room for very little difference of opinion. There are only two estimates before the public of the deficiencies in the registered births and deaths, each of which points to the same correction of any quotient obtained by dividing the registered deaths by the registered births. According to Mr. Rickman, the registered deaths are to be increased nine per cent., and the registered births twenty-three per cent, in order to obtain the true numbers. According to my estimate, the increase is fourteen and twenty-seven per cent. respectively. The ages of four per cent. of the total registered deaths are not specified; the true number of the deaths, under the age of five years, are also to be increased two per cent. on account of the births having been progressively increasing. According to Mr. Rickman's estimate, then, it may be said that the deaths specified as occurring under the age of five years are to be increased (4+9+2=) fifteen per cent. According to my estimate, the increase is (4+14+2=) twenty per cent.

In England and Wales, during the eighteen years 1813-30, the registered births of females amounted to 3,129,368, and the deaths specified, as occurring under the age of five years, amounted to 622,903. If the registry of the births and deaths had been complete, or if they had been defective in an equal degree, we should have 19.9 (the quotient of the above numbers) to represent the deaths under five years out of one hundred born. But, according to Mr. Rickman, the births are to be increased twenty-three per cent., and the deaths fifteen per cent; the quotient of the corrected numbers will then be 18.6. According to my estimate, on increasing the births twenty-seven, and the specified deaths twenty per cent, the quotient will become 18.8. These corrected quotients approach so near to each other, that they may be regarded as identical; and it may be assumed as a fact, in which all writers will agree, that the apparent results may be reduced to the true by diminishing them five per cent. In the following table, I have thought it preferable

to state the apparent and not the corrected numbers for each county. The necessary correction will not be exactly the same for every county; and a diminution of five per cent may be deemed superfluous in a case where the apparent results are already thirty per cent lower than any other results with which they can be compared.

TABLE *showing the Counties of England arranged according to the Mortality under the Age of Five Years out of* 100 *Born; also showing the Proportion of the total Population of each County employed in Agriculture in* 1821.

COUNTIES.	Dying under 5 years out of 100 born.		Females dying annually out of 100 living under 5 years	Agricultural Population per cent. in 1821.	COUNTIES.	Dying under 5 years out of 100 born.		Females dying annually out of 100 living under 5 yrs	Proportion of Agricultural Population in 1821.
	M.	F.				M.	F.		
Cornwall	*15.3	13.7	3.12	38	Norfolk	20.8	18.3	4.40	49
North York	15.9	13.8	3.17	43	Essex	20.6	18.4	3.95	56
Westmoreland..	15.5	13.8	3.49	49	Hertford	20.6	18.4	4.03	52
Hereford	16.4	13.9	3.13	62	Monmouth?....	21.4	18.6	3.51	43
Sussex	17.2	14.6	3.21	50	Cumberland ...	20.9	18.8	4.46	36
Wilts	16.5	14.6	3.25	52	Northampton ..	21.5	18.8	3.97	53
Suffolk	16.8	14.8	3.24	56	Durham	21.9	19.2	4.49	21
Dorset	17.0	14.8	3.32	49	Kent	22.0	19.8	4.75	36
Southampton ..	18.2	15.9	3.77	42	England and Wales	22.5	19.9	4.56	34
Gloucester	18.2	16.1	3.55	32	Leicester	22.9	20.0	4.38	35
Bedford	19.0	16.3	3.49	62	Huntingdon ...	21.6	20.0	4.21	62
Rutland	18.5	16.5	3.84	61	Worcester	22.9	20.2	5.21	38
Berks	18.8	16.5	4.16	53	East York	23.2	20.4	4.66	38
Salop	18.9	16.7	3.91	44	Cambridge	23.9	21.0	5.08	61
Somerset	19.2	16.7	3.80	43	Nottingham....	24.4	21.3	5.37	35
Northumberland	19.3	16.7	3.35	27	West York	24.2	21.5	4.57	20
Oxford	20.1	17.0	4.14	55	Chester	25.8	22.2	4.78	35
Derby	20.0	17.3	3.72	34	Stafford	24.9	22.2	5.43	27
Devon	19.0	17.4	3.96	41	Lancaster	28.3	25.3	5.78	11
Bucks	20.6	17.5	3.98	58	Warwick	28.5	25.8	5.29	28
Lincoln.....	20.5	17.6	4.39	59	Surrey	29.6	25.9	6.40	17
Wales?...	19.7	18.2	3.38	51	Middlesex	29.9	26.2	6.77	4

* The numbers in the first and second columns are to be diminished 5 per cent, to obtain the true numbers.

For the sake of comparing the results from the two methods of investigation, I have stated, in the third column of the above table, the number of females dying annually in each county under the age of five years, out of 100 constantly living under the age of five years; this column is merely a reprint of the seventh column of the table which I have given at page 409 of No. 641 of THE LANCET. The numbers in this column are subject to a small error consequent on its having been assumed that the living under the age of five years had increased uniformly during the eighteen years over which the observation extends—an assumption not accurately true, although never leading to any material error. The new results stated in the first and second columns, not being subject to this source of error, are more to be relied upon for classifying the counties of England, according to the mortality under the age of five years. It will be seen, on inspection, that the two methods of investigation lead very nearly to the same results, each number in the second column being generally equal to the number in the third column, multiplied by 4.3, which is the proportion existing according to a table of mortality, founded upon either mode of viewing the subject. Wales and Monmouth are the only apparent exceptions, in which districts the registration has always been acknowledged as defective in the highest degree. I have also added a fourth column, indicating the number of families employed in agriculture out of every 100 families existing in 1821. In any given locality, the mortality of agriculturists is considerably less than the mortality of the rest of the population; and it is impossible to obtain any correct idea of the relative healthfulness of different localities, without a knowledge of the proportion employed as agriculturists, and suffering the minimum

mortality. The recent observation of the population of Belgium may be cited as an illustration of this principle. This population has been divided into two parts, one-fourth part inhabiting towns, the remaining three-fourths belonging to rural parishes. The mortality of these two sections differed to the amount of thirty per cent.

The *London Bills of Mortality*, for the 100 years ending with 1829, supply one of the best proofs of the diminished mortality of infants. Taking five successive periods of twenty years each, the rate of diminution has proceeded with extreme regularity. In the twenty years, 1730-49, out of 100 born 74.5 died under the age of five years. During the twenty years 1810-29, only 31.8 died out of the same number. The correctness of these numbers rests upon the assumption, that the registered births and deaths have always been deficient in an equal degree. That such has been nearly the case for the last twenty years, is rendered nearly certain by the coincidence of results thus obtained with results obtained on different principles, and there appears no reason to suspect that this has not been the case throughout the entire period of 100 years. The London bills of mortality, for the single years of the century, have been published in a statistical work of Mr. Marshall. They have not before been published in the present form for so extensive a period. The almost exact coincidence of the numbers dying at ages greater than sixty years, during the former and during the latter half of the century, confirms the conclusions, deduced from other grounds, that the mortality in London above the age of sixty years has suffered no diminution.

TABLE *showing the Ages of the Dying according to the "London Bills of Mortality" for* 100 *Years, in five periods of* 20 *Years each; also showing the Number Dying under five Years out of* 100 *born.*

Between Ages.	1730-49	1750-69	1770-89	1790-09	1810-29	1730-1779	1780-1829
0— 2	190200	153886	140810	117070	112135	421259	292842
2— 5	44887	39808	39248	42501	39659	105714	100389
5— 10	18488	15760	15349	15537	16471	42262	39343
10— 20	16006	14629	15221	12187	14213	38541	33715
20— 30	40666	34972	31222	26244	27768	91913	68959
30— 40	49679	41188	37158	35638	35579	110042	89200
40— 50	51178	42903	40057	38660	39385	114289	97894
50— 60	41123	34875	33791	33961	36598	93168	87180
60— 70	32080	30221	28153	28368	33935	76456	76601
70— 80	23288	21285	20724	20333	27248	55215	57863
80— 90	11735	9327	8394	8639	12693	25231	25557
90—100	1955	1379	1176	1273	2155	3929	4009
Above 100	182	94	118	72	71	327	210
Total Deaths..	521467	440327	411721	380683	397910	1178346	973762
Total Births ..	315456	307395	349477	386393	477910	796029	1040602
Dying per cent. under 5 years..	74.5	63.0	51.5	41.3	31.8	66.2	37.8

The method of observing facts in human mortality, is founded upon principles so obvious, and of such extreme simplicity, and yet the ignorance of these principles is so universal, that I may be excused for now offering a few general remarks on the subject. The knowledge of these principles appears to be exclusively confined to those professionally engaged in the study of the laws of human mortality; the simple principles which form the foundation of every professional work on the subject, appear to have produced no impression on the minds of mathematicians in general, or on the minds of the public. For several years past the government press of England has been widely diffusing erroneous principles and unfounded results. The few persons who through their knowledge and reputation might easily have dissipated these errors, have remained silent. No sound public opinion will be formed on the subject, until the spirit of investigating these matters be infused among a new and larger class of the community. Circumstances point to the medical profession as the quarter whence the public may reasonably demand the rectification of unsound views of human mortality. The public have recently incurred an undisputed loss of some hundreds of thousands of pounds for want of the desired information. The Government has been selling annuities on old lives, upon principles well known to be false by all qualified persons. Mr. Rickman's remarks

on the subject are highly amusing,—he suggests that the names of the purchasers should be published. According to his views, the public indignation ought to fall on the buyers, and not on the pretenders to knowledge who advised the Government to sell commodities at less than their true value.

All writers on the subject are unanimously of opinion that there is only one correct way of arriving at the knowledge of the law of mortality of any population, which is comprehended in observing—*the number living, and the number dying, at given intervals of age*. The observation may be made, and all the essential results may be obtained, by any person of the most ordinary capacity and acquirements. A table of three columns is to be prepared; the first column containing the extent of human life divided into quinquennial intervals of age from birth upwards. In the second column are then to be placed the numbers observed to be living at the intervals of age expressed in the first column. In the third column are to be placed the observed number of deaths corresponding to the same intervals of age. If a fourth column be added, containing the quotients of the dying by the living at the successive intervals,—this column will express the law of mortality of the population observed. This fourth column will contain the substance of all the information sought, and is equally attainable by the inexperienced as well as by the experienced in these matters. What is technically called a "table of mortality" consists in expressing for single years of age, the rates of mortality, agreeing, when combined, with the rates of mortality observed for quinquennial or decennial intervals of age. The skill of the calculator is, or ought to be, measured by the degree of uniformity with which he makes the annual rates increase or decrease, at the same time never deviating from the given facts for larger intervals of age. The Carlisle table of Mr. Milne is extremely defective in this respect; the rates for successive years of age rise and fall suddenly in a degree without example in any other table. I have published a table agreeing equally well with the observed facts at Carlisle, in which the annual rates increase with a degree of uniformity not found in the tables of any other author.

The mainspring of the errors circulated by Mr. Rickman through the government press, appears to be the defective construction of the 'Northampton Table." Dr. Price, the author of this table, is, however, the last person to whom any blame can be attached; for no one has explained better by word and by example the only correct method of investigating the laws of human mortality. Because Dr. Price, having no information respecting the ages of the living in the town of Northampton, was compelled to have recourse to hypothetical numbers; Mr. Rickman has absurdly had recourse to hypothetical numbers when the true number and ages of the living were placed before him. Indeed this is representing the affair in too favourable a light. For Dr. Price, before adopting the hypothesis of the population being stationary, collected a great multitude of facts to prove that such was nearly the case at the time he wrote. But Mr. Rickman adopts the hypothesis of the population being stationary, and at the same time admits that the population of England was then increasing with a rapidity never before heard of in a long-settled country.

Mr. Rickman, in divesting himself of the gross errors with which he has disfigured his literary productions, displays more caution than candour. He attempts to transfer the blame, justly due to himself, to continental writers. He cunningly reproves them for adopting the hypothesis of the 'population being stationary," and conceals from his readers the fact that he is the only person who has carried this hypothesis to an absurd length, and this when the making of any hypothesis as to the ages of the living was the acme of absurdity. The errors consequent on adopting this hypothesis are comparatively small among continental nations, on account of the generally slow increase of the population; and the adoption of this defective hypothesis is excusable where the ages of the living have not been ascertained. Mr. Rickman has lately discovered that he is "a person not qualified for arriving at ultimate results," and he has consequently associated with himself a professional calculator. Whether his assistant is able to calculate correctly we have little means of judging; because any statement of the precise connection between the materials and the alleged results is carefully and suspiciously withheld. The results published at second-hand by Mr. Rickman, have been gradually approaching the results stated by me in THE LANCET.

On the 5th of December there appeared a statement in THE LANCET, that the mean duration of female life at birth in England and Wales was 43.70 years. In a medical periodical of the 19th December, Mr. Rickman states the number for England to be 43.7 years. The publication of the table which coincides in such an extraordinary degree with mine, is an object highly to be desired. In the same number of THE LANCET I made a statement founded upon opinions of Mr. Rickman loosely expressed in the Population Returns, that my results would be found to differ only one-twentieth part from results consistent with Mr. Rickman's estimated deficiency in the registered deaths. One fortnight afterwards, the results which I called for, made their first appearance, as seen by the following table:—

TWO STATEMENTS *of the Annual Mortality of Females in England,* [illegible] *published in* THE LANCET *of December* 5, 1835, *the other by Mr.* RICKMAN *on Dec[illegible]er* 19, 1835.

Between Ages.	Rickman.		Edmon
	One out of	Or, out of 100 Living	Out of 100 Living
0 — 5	23	4.35	4.60
5 — 10	158	.63	.67
10 — 15	201	.50	.52
15 — 20	138	.72	.76
20 — 30	102	.98	1.04
30 — 40	85	1.18	1.24
40 — 50	71	1.41	1.49
50 — 60	49	2.04	2.16
60 — 70	25	4.00	4.12
70 — 80	10.8	9.26	9.69
80 — 90	4.9	20.40	21.46
90 — 100	2.9	34.50	37.19

The results which I have stated for England and Wales coincide almost exactly with the results of my theoretical table of "Mean Mortality" which I published four years ago, together with a complete and most extensive series of life insurance and annuity tables founded thereon. According to this table, the mortality at every age (excepting the period of infancy) is twenty per cent greater than that indicated by the Carlisle Table. Mr. Rickman and his assistant now admit the facts to be within five per cent of my statement, and they consequently admit that the mortality in England is fifteen per cent higher than that shown by their previously adopted but now abandoned Carlisle Table.

I have been lately informed that Mr. Milne himself, the promulgator of the Carlisle Table, has made a tardy acknowledgment of errors with which he must have been acquainted for several years past. He now admits that the mortality under five years, out of 100 born, in all England, is 24 instead of 32, as he previously stated. He has, however, apparently admitted only two-thirds of what he knows to be the real error. Mr. Milne, on the publication of his table, gave "a proof" of its coincidence at all ages with the mortality of the English population. His admission, therefore, that he had greatly *over*-estimated the mortality in infancy, is tantamount to the admission that he had greatly *under*-estimated the mortality at every age above fifteen years. The Carlisle Table may, therefore, be considered as abandoned by its parent.

46, Regent-square, London;
January 18th, 1836.

ARREST OF VOMITING BY CREOSOTE.

To the Editor of THE LANCET.

SIR,—The following cases of stomachic disease, treated by creosote, are at your service, for insertion in your valuable Journal. I remain, Sir, your obedient humble servant,

GEORGE BODINGTON.
Erdington, Warwickshire, Jan. 13, 1836.

CASE 1.—Mrs. S., a young married lady, the mother of one child, experienced a most difficult labour about two years since, the operation of "turning" having been resorted to, in consequence of an unusual presentation. She has since suffered from relaxation of the uterine system, irregular menstruation, hysteria, and constant sickness, and, on one or two occasions, from uterine hemorrhage; but the most distressing of her complaints has been an almost daily vomiting of food, some hours after taking it, at intervals of two, four, six, or eight hours, the food always returning in an undigested mass, whatever length of time may have elapsed from the period of taking the meal. Thus the dinner, taken at two o'clock p.m., would frequently remain on the stomach until four a.m.; and then be rejected in the same state as when taken, the only change being that produced by mastication. She complained also of a sensation of tightness and constriction across the chest, headache, and so much dimness of vision, as to amount almost to blindness; her countenance looked bloated and pale,

the pulse was small and feeble, and she had a constant feeling of weariness and prostration of strength. She had been for some months under medical treatment without benefit. She visited Cheltenham in the course of the last summer, and consulted some of the most eminent medical men there with no better result. Returning home in the autumn, she again came under my care, and having read in THE LANCET an account of Dr. Elliotson's success in the treatment of similar affections by creosote. I tried that remedy, mixing six drops of it in a little mucilage, with six ounces of water. The patient took but two large spoonfuls of this mixture, when a remarkable change took place in every respect for the better. She remained without sickness a whole day and night, which had not been the case any time for six months previous. Her features looked more natural, the headache and dimness of sight disappeared, the catamenia shortly afterwards occurred in a more natural and copious flow, and she appeared as if cured by magic, so sudden and decided was the effect; but being of an irresolute mind, I could not prevail upon her to continue the medicine, on account of its nauseous flavour. She had taken but one dose, and in a few days after enjoying her comfortable change, she began to experience a return of the symptoms; I then prevailed upon her to take a pill twice a day containing one drop of creosote in two or three grains of aromatic confection. She continued this for a few days, and remained afterwards perfectly well.

CASE 2. The next case occurred in the person of an infant, about eleven months old; the sickness continued daily for a month, and resisted all means employed to subdue it. This, like the last, seemed to consist in a suspension of the process of digestion, as the mother informed me that rice given to the child for dinner at two o'clock p.m., was rejected the next morning from the stomach, unchanged in any respect. Indeed, this was the case with all the food the child took. It was rejected, frequently many hours afterwards, unaltered. The consequence was, great prostration of strength, with flaccidity of the muscles, pallid countenance, &c. One drop of creosote, in an ounce and a half mixture, was administered, giving one teaspoonful three times a day with the completest success. The infant perfectly recovered, and needed no more medicine.

Remarks.—I think these cases corroborative of the remarks of the learned professor of *University College* on the powers of creosote, and I am the more induced to transmit them for publication, seeing that some of your correspondents manifest a criticising disposition towards the lecturer. One declares that he has not read "his book," another that he does not fit his "case," so that if the Doctor's views and practice do not exactly correspond with those of all the carping critics who may exist from John O'Groat's to the Land's End in Cornwall, judgment must be pronounced against him. For myself I am content to know that the learned Doctor is engaged diligently in reading the great book of nature, and own myself indebted for many valuable hints, derived from the perusal of his talented, judicious, and highly practical clinical lectures, as I have found them reported in the pages of THE LANCET.

CASE OF

FUNGUS MEDULLARIS

IN THE

CAVITY OF THE PELVIS,

By JULIUS WOLFF, M.D., *Dublin.*

A. P., 16 years of age, and of a slender habit, had, except during some diseases in his childhood, been perfectly healthy, up to the period at which the affection about to be described made its appearance. When 15 years of age, he began to support his poor parents by dealing in various small articles, which he carried in a basket, the edge of which, as he walked, always pressed or struck against the upper part of the femur. One day he perceived on the inner side of the right thigh, about two and a half inches below Poupart's ligament, a swelling of about the size of a hazel nut, which increased by degrees and impeded the motion of the limb. He applied to a surgeon, who ordered him to rub it with mercurial ointment, and to apply cataplasms; but under the use of these means the swelling increased.

In the month of February, 1834, he applied to me in Hanover, where I was then practising. I found the swelling of about the size of a duck's egg, very hard, uneven, immoveable, and insensible to the touch. The patient was in other respects very well, except that the swelling caused a feeling of tightness over the femur when walking, and, consequently, impeded his gait.

It could not be an inguinal or a femoral hernia, because the swelling had an irregular shape, was hard, uneven, and immoveable, and its site did not correspond with any of the apertures through which herniæ make their appearance.

It could not be a bubo, because the swelling was too far below the inguinal glands. It had lasted already seven months, and the skin which covered it presented its natural colour.

I had no reason to suspect the existence

of psoas-abscess, because the symptoms which precede and attend such an affection were not present, and no fluctuation was perceived.

I did not apprehend it to be fungous medulla, because the manner of its commencement and its course seemed to contradict the supposition.

I ordered the patient to rub the tumour with a mixture of mercurial ointment and iodine, and to employ, internally, Plummer's powder — (*Hydrarg. Chlorat. mit.; Stib. Sulphur. Aurant.*) This treatment effected no improvement; but a few weeks after I could move the swelling under the skin from one side to the other.

The patient having requested me to deliver him from the inconvenience under which he was labouring, I proposed an operation, as the surest and quickest means of getting rid of it. I expected that after having first made a longitudinal incision, and then detached the skin and fascia lata which covered the swelling, the remaining adhesions of the morbid mass could easily be detached with the fingers or the shaft of the scalpel.

Operation.—I performed the operation in the presence of two surgeons, Dr. Henniger and Mr. Lange. After I had cut through the integuments and fascia lata, a convolution of dark-blue vessels, and a cartilaginous mass, closely intermixed with each other, were forced out of the wound. They were enclosed in a white, thick, tendinous membrane, and felt hard to the touch. I introduced a dissecting hook into the morbid mass, with which I drew it forth, and tried to separate the adhesions with the fingers and knife, by which means it came more fully into view. Further examination with the finger showed that the mass had more extensive attachments than was at first apprehended, that it went both deeper between the muscles, and higher towards Poupart's ligament. I enlarged the incision in the skin, and the morbid mass, which was firmly adherent to the muscles, was, with great care, separated, and the muscles were thus laid perfectly bare.

To my great alarm I found now that the morbid mass passed below Poupart's ligament, into the abdomen, and could not be drawn forth, nor could I introduce my finger, to separate the adhesions. I had thus got into a difficulty, which, however, I endeavoured to conceal from the many persons who were present at the operation, until, after more accurately examining the wound with my finger, and reflecting a few moments, I came to the resolution of making an incision through the integuments, above Poupart's ligament, in such a manner as is practised when we wish to take up the common iliac artery. Through this incision, which was about two or two and a half inches long, I introduced the first and second finger of my left hand, under the sac of the peritoneum, to the psoas muscle. Here I discovered a soft morbid mass, which covered a part of this muscle, and which could easily be separated from it by the fingers. After this was done, I found no difficulty in separating that morbid portion which adhered to Poupart's ligament, and drawing forth the mass which I had just before separated with my fingers in the abdomen. The part thus separated was of the weight of nine and a half ounces.

Morbid appearances.—On examination of the morbid structure, it was found that the part which had been situated out of the abdomen, and which had felt so hard and uneven, consisted of dark-blue dilated and contorted vessels, mixed up with a cartilaginous mass, and little granules of fat, all of which were enclosed in a thick white fibrous tunic. The part situated in the abdomen was soft, like the substance of the brain, attached together, of a gray-white colour, intermingled with a great number of minute red vessels, and enclosed in a thin white membrane. In short, it had all the characters of medullary sarcoma.

Whether the disease took its origin internally or externally it might be difficult to decide positively. To me however it seems most probable, that the fungous mass in the cavity of the pelvis was of a later date than that situated on he thigh, because the patient had never complained of general indisposition, and any inconvenience he had suffered was limited to the external swelling alone.

Progress.—The wound above Poupart's ligament was soon healed up by being simply brought together with emplast. adhæsiv., whilst the larger wound below Poupart's ligament was dressed with simple ointment. The patient was put to bed, and an appropriate diet was ordered. Except a very slight degree of fever, which appeared in the evening of the 3rd day after the operation, the patient went on very well. His appetite and sleep were good, and the bowels regular. The wound looked well, and suppurated but little. A few days after, he was able to be out of bed, and could walk up and down the room. In the fifth week he went out of doors, without, however, returning to his former occupation. The wound gradually became smaller, and gave issue to but little matter, and that of a good quality.

In the seventh or eighth week after the operation, one afternoon, a sudden bleeding from the wound took place, without any known cause, and to such a considerable amount that the patient was almost exhausted. Cold applications were used, and the bleeding was thus checked. I was unable to discover the source of this hemorrhage. It returned frequently, but in smaller quantities, and was always checked by the

application of cold water. After a few weeks the patient got a cachectic look, became low-spirited, and lost his appetite. He had, during the day, at irregular intervals, horripilations, and, towards evening, a degree of low fever. The wound assumed an unfavourable aspect, and ceased to secrete healthy matter, but poured forth, in place of it, serum in great quantities. Out of the bottom of the wound a brain-like mass again shot forth. Light nourishing diet was now ordered, together with the decoction of the cinchona bark, with sulphuric acid, whilst, externally, fomentations, with the same decoction, and alum, were given. The patient apparently, rallied. His appetite returned. In the evening the fever gradually left him, the wound had assumed a somewhat better appearance, the morbid substance was secreted in large quantities, and the secretion of the serous fluid decreased.

The patient continued to be in this favourable state for a few weeks, and the wound appeared becoming less. But he had, now and then, slight fits of intermittent fever, of the tertian type, which was endemic in the village in which he lived; but this was soon checked by using the sulphate of quinine.

In this state the patient remained for a few months. His strength apparently increased, the wound became smaller, and secreted but little of the fluid mentioned. The cachectic appearance of the patient, however, did not leave him, though he said that he felt very well. The wound, which was now about the size of half-a-crown, became again of a whitely appearance, and anew secreted a very considerable quantity of the above-mentioned fluid, so that the patient was constantly wet with it. He grew thin, got evening-fever, and had a dry cough, lost his appetite, and was obliged once more to be constantly confined to his bed. This excessive secretion lasted for six or seven weeks, until at length, by the steady use of external and internal tonic and astringent remedies, it, to a certain degree, diminished. The patient, however, was visibly wasting away; the dry cough was now very teasing, and the bark no longer agreed with him. I ordered *Decoct. Lich. Island., Pulv. Sulph. Aurant., Antim., et Extr. Cicut.*, which diminished the cough. Soon after, however, colliquative perspiration and diarrhœa made their appearance, together with expectoration of matter, and gangræn. decubit., on the os sacrum, and aphthæ in the mouth, so that the patient was unable to swallow anything.

In the thirteenth month after the operation, death ensued, the patient being in a state of extreme emaciation. The examination of the body was not permitted.

34, Nassau-street;
Dublin, Jan. 11th, 1836.

PHENOMENON OF THE PULSE.

To the Editor of THE LANCET.

SIR,—The following is transmitted for insertion in a corner of your periodical:—

Staff-assistant surgeon Dr. Hopkins, having occasion to be absent from town for twenty-four hours, requested me to take medical charge of the detachments, stationed in St. John's, for him until his return. On doing so, he stated that he had been called in the morning to see one of the sergeant's wives, who appeared to be labouring under an attack of modified epilepsy. He had ordered an aperient and an injection. About four hours after (at two p.m.) I visited the patient, and found her presenting the following amongst other symptoms:—Complete coma; the pupils dilated; pulse full, soft, and between 80 and 90. On inquiry, I learnt that she had complained, on the previous day, of headache, and had, on the same evening, got drunk, being accustomed to tippling. I ordered fifteen grains of calomel, immediately to be followed by a solution of sulphate of magnesia (℥j to ℥viij of water, ℥ij. 0m. 6. post. calomelan), wet cloths to the head, and fomentations, and bottles filled with hot water, to be applied to the soles of the feet, the calves of the legs, &c. While I was standing by her side, with the finger on the pulse, she was seized with a sub-epileptic fit, experiencing twitches of the muscles of the face, of the superior and inferior extremities, &c. The *pulse, from being full* and *soft*, became *a mere thread*, and *quicker* and *harder*. I was struck with the phenomenon, as I could not bring to my recollection having ever read of such an occurrence during epilepsy, and on reference to my books, I have not been able to find the circumstance recorded. I have conversed with most of my medical brethren here, some of whom have retired from practice for ten, fifteen, or twenty years, but not one of them has ever met with such an occurrence. It is from this circumstance that I have ventured to request the insertion of some particulars of the case. One of two causes must have occasioned the diminution of the pulse's volume, either a muscular "vis insita," partaking of the influence of the epileptic seizure, or pressure of the muscles of the arm and fore-arm. But if the latter was efficient, would not the artery, where it is superficial, at the wrist, rather have *increased* in volume than otherwise? For if we fill a flexible tube with a fluid, and apply a compressing force to two-thirds of its extent, the remaining third will increase in volume, as a matter of course, if the tube be dilatable. I have always been disinclined to allow the claim of muscularity of the arteries; but this case has, I confess, a little staggered my creed. The woman did

well, the medicine acted copiously, and next day she complained of nothing but headache and debility. I am, Sir, your obedient servant,

JOHN FURLONGE, M.D.

St. John's, Antigua, Dec. 12, 1835.

RESUSCITATION FROM DROWNING.

To the Editor of THE LANCET.

SIR,—My connection with the *Royal Humane Society* as one of its medical assistants, and the vicinity of my residence to the receiving-house in Hyde Park, have led to my being called upon to treat most of the cases of submersion requiring medical aid which have occurred in the Serpentine for some years past. I was there on Christmas-day, at the time of the accident which, unhappily, was attended with the loss of seven lives, and took an active part in the treatment of the sufferers.

A committee of the society met to inquire into the circumstances of this fatal occurrence, and the notices of their report in the newspapers have produced a long leading article in *the Medical Gazette* of the 9th inst. on "The Humane Society and its exertions." The writer entertains the most preposterously absurd notions relative to asphyxia from submersion and resuscitation, and is, in consequence, quite unable to conceive how seven persons could have been lost, out of fifteen taken out of the water and brought into the receiving house, unless there existed a fault somewhere. He, however, lauds the society, and admits that it exerts itself to the utmost of its means. In reference also to the medical men who gave their gratuitous assistance on that day, he says, "It must not for a moment be supposed that we mean to impute the slightest deficiency of skill to the gentlemen employed. * * * The fact is undeniable that here were *fifteen* bodies all at once, and under one roof, to be attended to by *seven* medical men. In this view of the case, perhaps, many will rather be surprised, that so many as eight were recovered."

I have not, therefore, any charge against the society or its medical assistants to rebut, for none has been made. My object is to point out in your valuable journal the erroneousness of the opinions before alluded to. I do not fear that the veriest tyro in the profession will be misled by them, though coming clothed with editorial authority. But it is more than probable that they may confirm the errors, and distress the minds, of some of the many non-professional persons who read the medical hebdomadals. The fairest way is to quote the words of the writer. He says,

"Some worthy old authors have handed down to us histories of recovery, when the submerged had lain sixteen hours, three days, and even seven weeks, in the water. But as we believe that the age of miracles did not extend to the seventeenth century, when these *facts* are related to have happened, and as we have reason to think that human beings were not differently organized formerly from what they are at present, we must respectfully decline giving credence to the marvellous stories aforesaid. *We can believe*, however, that there have been some rare cases of recovery where individuals have remained *above an hour in the water*."

The writer here evidently means *under* the water. Again, after observing that where submersion is accompanied by apoplexy, the instances of recovery are extremely rare, he adds,

"Not so where syncope occurs, as when a person faints with terror at the instant of submersion, or immediately before; for in this state, as is known, respiration may remain suspended for a period more or less considerable, and probably the greater number of those cases which seem most anomalous, where recovery has been effected after a *sojourn of two hours or upwards in the watery element*, have been of this description."

Here, also, I presume we must read *under*, instead of *in*, the water, for persons have been many hours *in* the water, without having respiration suspended at all. I shall trouble you with only one more quotation. The writer says,

"In the Paris arrangements for the resuscitation of the apparently drowned, *three* hours are taken as the *maximum*, beyond which there is no hope. Where it is ascertained, for instance, that a person has been *eleven* hours submerged, no means of probable succour are left untried, and *the result of this practice is highly satisfactory*." (!!!)

The result in every such case would, of course, be precisely similar to that of endeavouring to reanimate the bodies of those unfortunate persons whose heads have been struck off by the guillotine, and as it is so *highly satisfactory* to our writing Parisian friends, I suppose we shall soon hear of their labours in this new work of charity. Equally vain and fruitless would be the ablest exertions to resuscitate those who had been *two hours*, or even *one hour*, submerged. The medical assistants of the Royal Humane Society are too well informed to make such ridiculous and futile attempts; but frequently in cases of submersion for shorter periods, where there is no *possibility* of success, they do institute and persevere in the use of means, out of respect for the feelings of relatives, or of the by-standers.

The experiments of the ablest modern physiologists, and the opinions of the latest approved writers on asphyxia, concur with

the result of experience in showing, that there is little chance of resuscitation after a body has been more than *five* consecutive minutes under the surface of the water. I doubt whether the *Royal Humane Society* possesses any well-authenticated record of a single case of recovery after the body had been submerged more than five minutes. I believe that every one of the seven persons who met their death at the Serpentine on Christmas day, had been more than that time under the water—some *of* them, I know, and perhaps all, very much more. It is not at all marvellous, then, that they were not restored. I am, Sir, your very obedient servant,

GEORGE WOOLLEY.

8. Brompton-row, Jan. 19, 1836.

*** The above letter reached us last week, but too late for insertion in our Number for Jan. 23rd.—ED. L.

STRANGULATED INGUINAL HERNIA.

To the Editor of THE LANCET.

SIR,—At the suggestion of my friend Dr. Lubbock, who witnessed the following case, I am induced to submit the same to you, requesting that you will insert it in your Journal, and I shall be glad to be made acquainted through your pages with such observations as may suggest themselves as to the treatment to be adopted under similar circumstances on a future occasion. I remain, Sir, yours respectfully,

W. G. GOWING.

Norwich, Dec. 31, 1836.

CASE.—Nov. 7, 1835. Mr. Lambert, æt. 30, of a robust constitution, by trade a baker, was, on Saturday morning, whilst lifting a sack of flour, suddenly seized with a severe pain in the lower part of the abdomen, which continued above an hour, when he became sensible of a swelling in the left groin, which gave him considerable pain on pressure, and continued to increase until about ten o'clock, when I was summoned to attend him. I found him suffering acute pain about the umbilicus, and vomiting everything which he drank. In the left groin there was a swelling, very tense, of an oblong shape, of about the size of a hen's egg, descending about one-third down the scrotum. I placed him in a supine position, and relaxed the abdominal aperture, by raising the limb on the diseased side, and attempted to return the intestine. The swelling was so exquisitely painful as almost to exclude the application of the taxis. Not succeeding, I administered a tobacco enema, and took away above twenty ounces of blood from the arm. He complained of sickness, but did not faint. I renewed the taxis, and in about ten minutes succeeded in returning the bowel. Ordered one grain of opium.

Eight o'clock. Vomiting continues to harass him; pulse 100; great thirst, and a general restlessness. Laxative injections ordered, which brought away some hard feces. A mixture composed of salts and senna, with five grains of calomel, every four hours.

Nov. 8. Nine o'clock a.m. No sleep; pulse 110; vomiting through the night; tongue clean; slight pain in the bowels, which was not increased on pressure; no motion. At four o'clock the symptoms remained the same. At ten I visited him again, and finding that his bowels had not been relieved, and that the vomiting continued, I gave him another laxative injection, which brought away more feces, and ordered a pill composed of a third of a grain of opium and two of calomel, every two hours.

9. He could not lie still for more than a very few minutes; frequent vomiting; pulse 110; tongue clean; occasional pain, which appeared to arise from spasm, as it came on by paroxysms; nearly all the muscles of the body, particularly those of the legs and arms, were affected with spasm. Dr. Lubbock was requested to visit him, and he prescribed one drop of croton oil, and five grains of calomel every four hours, with the effervescent mixture. We met again in the evening, but with no better prospect. Every kind of nourishment was rejected by the stomach; pulse 120; no relief in the bowels.

10. Passed a restless night, took some coffee, which remained on the stomach above an hour. Strength considerably reduced; pulse more feeble and frequent; countenance shrunk, and the mouth frequently filled with a bilious stercoraceous matter; he died at about half-past four.

Post-mortem Examination, Six Hours after Death.—On opening the abdomen, the portion of strangulated intestine, which consisted of a knuckle of ileum, about two inches in length, was of a dark-brown colour, and adhered firmly and generally to the sac, which so completely encircled its upper portion, as not only to obstruct the passage of the feces through the large intestines, but also the circulation of the blood. Its parietes were thickened, and infiltrated with blood, its external surfaces (the peritoneal covering) firmly adhering together. Its extreme points rested just within the internal ring, which permitted the finger to enter freely, as also did the external ring. The abdominal viscera generally, presented a healthy appearance, except that portion which immediately covered the tumour, which was slightly ecchymosed, probably in consequence of the taxis. The stomach was perfectly empty, and very much contracted; the intestines,

as far as the strictured portion, were distended with liquid feces and gas.

Might not my patient's life have been preserved, if, thirty hours after the hernia was returned, an incision had been made so as to expose the abdominal ring, the bowel (which would have been seen) been drawn down, and the hernial sac slit open?

COPAIBAL RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I read in the last Number of your able Journal the communication of Mr. Eagle relative to the circumstance of copaiba producing the disease termed "gonorrhœal rheumatism," and beg to add my testimony as to the correctness of the views he has taken upon the subject.

It has fallen to my lot to attend a great number of venereal affections, but in no one instance have I seen gonorrhœal rheumatism produced unless copaiba had antecedently been exhibited. I have now before me notes of a case which came under my treatment last winter, in which the most distressing symptoms supervened on the use of the above medicine. The synovial membranes of the knee were greatly enlarged and indurated; the dorsum of each foot was swelled, and the pain was so excruciating, that the patient was unable to put his feet to the ground for a period of six weeks. His medical attendant pursued (very properly) antiphlogistic measures, such as local bleedings, saline purgatives, &c., but at the same time prescribed a copaiba mixture. When I was called in to see the patient, I found him labouring under great nervous excitement, and he was exceedingly emaciated; pulse 30; numerous petechiæ on different parts of the body; much fever present, and, altogether, he was in a very precarious state. I immediately ordered a discontinuance of the copaiba mixture, but at the same time directed that he should persist in the use of the fever mixture, and that the local bleeding should be renewed. Having pursued this system for a week, he declared himself to be quite "another man," and was enabled to follow his usual occupation. The discharge ceased upon his using an injection composed of the *Plumb. Superac.* and the *Zinc. Sulph.*

I might give you other cases, but refrain from doing so, in order that I may not encroach too much on your valuable columns.

I am, Sir, your constant subscriber,

W. B. MADDOCK, Surgeon.

London, Jan. 19th, 1836.

CÆSAREAN OPERATION,

TERMINATING FATALLY FOR THE MOTHER AND SUCCESSFULLY FOR THE CHILD.

THE following interesting case, attended and related by Dr. B. G. KRANEFUSS, in *Rust's Magazine*, will be found in No. 2, Vol. 45, of that periodical, the last-published number of the journal:—

The subject of the case was a female, forty-two years of age, who was now pregnant for the first time. The author was called on to attend her on the 18th of March, and found that she had been in labour since the 15th. The midwife in attendance had made several improper attempts, with the hand introduced into the vagina, to change the position of the child, and, moreover, had exercised very violent pressure on the sides of the abdomen, in order, as she said, to hasten the birth of the child. The whole abdomen was now excessively painful; the external organs very red, and also painful. On introducing the finger, which caused a good deal of pain, into the vagina, and exploring the pelvis, the antero-posterior diameter of the inlet was found not to exceed two inches; the child's head presented at the os uteri, which was open, and the motions of the infant could be distinctly felt. The Cæsarean operation was proposed, and approved of, in consultation, by Dr. Warenstoff, who had performed it twice, and once successfully, for both mother and child.

The patient was a woman of short stature, and evidently deformed by rickets, from which she had suffered in her youth. During the period of pregnancy she caught cold, and still coughed a good deal. The pelvis was much inclined forwards; the distance of both superior anterior spines of the ileum was eleven inches, and the conjugate diameter twelve inches; the conjugate diameter of the inlet was estimated at two inches.

The patient having consented to the operation, the surgeon's first care was to empty the bladder and intestinal canal. The woman was now placed in a bed prepared for the purpose; two assistants held her feet; another, placed at the head, took charge of the arms; a physician, aided by a midwife, was stationed on the left side, and intrusted with the important duty of preventing the intestines from protruding during the operation. It was impossible to procure sponges, which are recommended by Graefe and Hedenus, in the house of this poor female; their place was, therefore, supplied by folding up a sheet in an elliptical form, and placing it over the front of the uterus, while proper persons took care that it should be applied equally to all the abdo-

minal parietes. The uterus seemed to lie in the middle of the hypogastrium; the first incision was, therefore, made in the linea alba, and successive layers of the abdominal wall were divided, with caution, down to the peritoneum, into which an opening was finally made; the division of the soft parts terminated at one inch and three quarters above the pubes, and extended upwards for five inches and a half.

The uterus now presented itself to view, and an incision was made, in the direction of the external wound, about one inch in length. This was immediately prolonged upwards and downwards, with the bistoury, to the length of five inches and a quarter. The child lay with its back forwards, and the operator proceeded to seek his feet, but was unable to succeed in reaching them, from the contractions of the uterus; the same cause rendered it impossible to seize the head; it therefore became necessary to enlarge both incisions downwards by half an inch; the child was then extracted, and although the uterus contracted strongly, no bowel protruded through the wound; however, the state of the infant requiring some assistance, and the person intrusted with the care of the abdomen having turned a one side to aid the nurse, a knuckle of intestine escaped, but was immediately reduced. The wound was now sponged with warm water, a roll of charpie dipped in oil was placed between the uterus and abdominal parietes; two stitches were applied, and the end of the roll was brought out from the lower angle of the wound, which was left open for about one inch and a half; strips of sticking plaster were also wound round the abdomen, and the wound was covered with a compress dipped in oil, and the whole was retained by a bandage.

Immediately after the operation the woman felt herself well; the pulse, sixty-two before the operation, had mounted only to sixty-five; the only bad symptom was a slight attack of vomiting, which came on immediately after the patient was placed in bed. She was ordered to take a teaspoonful of the following mixture every hour:—℞ *Decoct. Semen. Lini* ʒvj; *Extract. Hyosciam.* ℈j; *Olei Amygd.* ʒj; *Syrup. Althææ* ʒss.

In the evening the patient's pulse had risen to 84, hard and full; the face coloured; the whole abdomen painful. The symptoms were immediately relieved by an abstraction of twelve ounces of blood.

20. Morning. She passed a quiet night, and seems in a favourable state; pulse 65, pretty strong; the lochia now come away, and a bloody serous fluid is discharged from the inferior angle of the wound. The urine is not discharged by voluntary efforts; the use of the catheter is necessary. The cough which existed previously to the operation is much diminished.

As to the child, it was a full-grown male well formed, weighing seven pounds and a half, and twenty inches long. The antero-posterior diameter of the head was four inches and a half; the transverse three inches and a half; and the mento-occipital five inches; the breadth of the shoulders four inches four lines. In the evening the woman was pretty well; however, the pain returned in the right side of the abdomen; pulse 75.

21. Morning. The physician was sent for to return a portion of intestine that protruded through the inferior angle of the wound during a fit of coughing. This was returned, and fresh plaster applied, so as to close nearly the whole wound. A clyster was administered without any effect, and henceforward it was constantly necessary to introdnce the catheter. *Mid-day.*—The pain in the right side of the abdomen has become very violent, and extends down to the inguinal region. It is diminished by leeching and cold applications.

℞ *Amygd. Recen. Excorticat.* ʒj; f. terendo cum aqua; *Valer.* q. s.; *Emulsio* ʒvj; *Ext. Hyosciam.* ℈j; *Aquæ Lauroceras* ʒiij; *Syrup. Althææ* ʒj: a spoonful every hour.

℞ *Opii* gr. ¼; *Sacch. Albi* gr. x; f. pulv. D. S.: to be taken in one dose. A lavement was given without any effect. In the evening the pulse rose to 90; the cough had diminished, and the pain in the abdomen was supportable.

22. Morning. The patient assures us she feels well; the pain has not increased; but the cough is now more violent.

℞ *Opii* gr. ¼; *Succ. Albi* gr. x; f. p.

The two last clysters given have not yet opened the bowels. Towards evening the patient became excited from the numerous visits she had received during the day, and the pulse rose to 112. In the night she coughed a great deal, and the pain of the abdomen became much worse. The epigastric region was now tympanitic, and an evacuation could not be obtained by clysters.

℞ *Olei Ricin.* ʒiss; *Vitel. ov.* No. ij; *Aquæ Valer.*, a. s. ut f. terendo emulsio ʒvi: a spoonful every half hour.

℞ *Opii* gr. ¼; *Elæosacch. Fœniculi* gr. x; f. p. deut. tal. Dos. vi. S. One powder every two hours. The cough was appeased by a few doses of this powder; aromatic fomentations were applied to the abdomen.

23. A discharge of some wind has taken place, but no stool; the pain is less; pulse 100; the urine red, taken off by the catheter. The wound has a good appearance, and union has already commenced.

24. Vomiting of a foul-smelling matter during the night; pulse 96; the countenance agitated.

℞ *Olei Ricini* ʒiss; *Gummi Mimos* ʒj; *Vitel. ovi unius*;—*Aq. Menthæ Piper., Valer.*, aa. ʒiij; f. l. a. emulsio, cui adde *Syrup.*

Mucus ʒij a spoonful every hour. A lavement with assafœtida.

Evening.—No stool; pulse weak, 104; another clyster brought away some wind, which gave the patient relief; she has slept but little since the operation; the cough is much diminished; the tongue is covered with a thick yellow crust.

25. The dressings were reviewed to-day; the wound seemed partially united, but the stitches remained firm. An ill-conditioned pus was discharged from the ununited points, especially when the abdomen was pressed laterally. During the night the patient made several efforts at stool, and passed some hard feces; pulse 110; abdomen still painful. The tendency to tympanitis is now evident; the patient is delirious, especially when awakened from sleep. The lochia copious, purulent, and fetid.—℞ *Rad. Caryoph., Valer. Min.*, aa. ʒss. *Infunde Aquæ Ferrid.* ℥vj. Stent per ½ horâ vas. tec.; colaturæ adde *Extr. Hyoscy.* gr. xv; *Æther. Sulphuric.* ʒss; *Syrup. Althææ* ℥j: aspoonful every two hours.

26. The nervous symptoms continue; the tongue is brown; great thirst; the patient complains of great pain; one stool of hard feces; pulse small, 115.

27. Pulse 96, more developed. The urine was passed for the first time without assistance, and is less red. On dressing the wound, its upper edge was found to be united. When the abdomen is pressed upon, the face gives sign of pain; appetite completely lost; thirst; no stool, though a clyster is administered twice a day.

28. The pain of the abdomen has become more acute and general. The patient received some alleviation after the application of cold compresses. An almond emulsion, with *Tinct. Opii* and *Aqua Lauro-ceras*, was ordered. Pulse 120.

29. The pain in the right side of the abdomen is very acute. The patient is much agitated, and cries out in agony. The face expresses great suffering, and has taken on the hippocratic cast. Pulse 140, small, and weak. Aromatic fomentations to the abdomen do not produce any effect as before.

30. A knuckle of intestine has given way, and the feces issue in great quantity through the inferior angle of the wound. Pulse 100, excessively small; face collapsed; abdomen less painful; hands and feet stone cold. The patient sank on the following day, 31st, with the common symptoms of gangrene of the intestine.

Body Examined on the 1st of April.

The edges of the wound, except inferiorly, were so closely united, that it became necessary to divide them with the bistoury. The abdominal contents, with the exception of the uterus and great intestine, were normal. The uterus was contracted to the size of a man's fist. Its inferior segment filled the inlet of the pelvis so much, as to oppose some resistance to its separation. The wound of the uterus was now only one inch and a quarter long, and the edges were filled with healthy granulations. We could observe no appearance of the intestine having been strangulated in the wound. The posterior surface of the uterus was tumefied, and of a deep-red colour. The whole of the colon, as far as the sigmoid flexure, was filled with hardened feces. Several deep-red spots were seen on the transverse and descending colon, but no gangrene. The anterior wall of the ascending colon was gangrenous throughout, and near the cæcum appeared two orifices, through which the feces escaped into the abdominal cavity. These openings corresponded in size with two roundish prominences of from one to two lines elevation, which existed on the posterior surface of the uterus. In this part only was there a deposit of yellowish fluid.

The pelvis of this patient was removed, and prepared for the museum of Munster; when measured, it was found that the distance between the antero-superior spines of the ileum was eleven inches; the conjugate diameter of the inlet two inches one line and a half; the transverse diameter five inches; the distance of the tuberosities of the ischia from each other, four inches. The child lives still, and is very healthy, a circumstance remarkable enough, if we reflect how much he must have suffered from the manœuvres of the midwife.

Rust's Magazine, No. 2, Vol. 45, contains a case, with a drawing, of medullary sarcoma, occupying the inferior surface of both hemispheres in front of the decussation of the second pair. The man was killed by an accident, and the symptoms to which this remarkable tumour gave rise could, therefore, only be collected from the report of his relations. We cannot award to them much value. We also find in the same number a very good delineation, with a detailed account, of Mr. Weiss's screw lithotrite.

CASE OF

PARAPLEGIA,

ACCOMPANIED BY

NON-SECRETION OF URINE AND FECES,

DURING MANY YEARS.

Described in a Memoir read at the Academy of Sciences and Arts of Padua. By G. Montesanto, M.D.

About three years ago the author of the above-mentioned memoir communicated to the *Academy of Medicine* the history of an Italian prisoner who passed several years of his life without having excreted either urine

or feces. This man, who had become an object of great curiosity to the Italian physicians, died at length in prison, and M. MONTESANTO now detailed a complete account of his life and malady.

Dominica Valetto, at the age of 18 years, fell from a great height. The accident, which occurred so far back as the year 1816, was followed by weakness of the lower limbs, and a certain difficulty of excreting both the urine and feces. In 1818 he was committed to the jail of Padua for some crime, and after the lapse of a year, was attacked with inflammation of the spinal marrow. The patient's life was saved by the assiduous care of M. MENATO, but sensation and motion were completely lost in the lower extremities. The paralysis was soon joined by a new order of phenomena. Every day, five or six hours after each report, Valetto vomited all solid and liquid substances that he had eaten. The excretion of feces and urine was now completely suppressed, and in addition to the vomiting by which the meals were daily rejected, the patient was now accustomed, after an interval of a few weeks, to throw up a quantity of stercoral matter by the mouth.

The patient had already passed eight years in this condition, when in the year 1828 he was submitted to the care of M. MONTESANTO. From 1828 to 1831, the vomiting of stercoral matter became more rare than before that period, and even sometimes was absent during a very long space of time. However, the rejection of fluids was more frequent, and this coincided with a plethoric state of the body that rendered it necessary to bleed the patient no less than sixty times. The oppressed respiration, hard accelerated pulse, fever, pain in the chest, and malaise, caused many apprehensions of hydrothorax; in fact, he just escaped falling a victim to this disease in 1830, after a very severe winter, from which he suffered extremely, the unfortunate patient's cell receiving no artificial warmth, while he was unable to cover himself in consequence of the weakness of his limbs.

Under these circumstances M. MONTESANTO wrote to the judicial authorities, demanding, in the name of humanity and for the interests of science, that the removal of the patient to the civil hospital might be permitted; but the prisoner had been condemned to confinement for life, and the tribunal was inexorable.

In 1831 the habits of Valetto underwent some change; he preferred the coarsest and most heavy food. He refused altogether broth and wine, but drank brandy in abundance. He expressed a great deal of suffering and disgust whenever any other food than his favourite choice was prepared for him. Thus on the 27th March 1832, a little fried fish which he ate against his will excited the most grave symptoms,—excessive cardialgia, pulse quick, and violent inflammatory fever, requiring repeated bleedings. Finally, after incessant though fruitless efforts, continued for fifteen days, which he passed without eating a morsel, after acute spasm of the stomach, and the exhibition of a pain in the back under which he suffered for several years, an unexpected vomiting of stercoral matter in great abundance came on, and towards the end of April the patient was restored to his former health.

At this period a violent shock of an earthquake threatened to overthrow the walls of his prison, and the patient was transported to another. During his passage he suffered severely from pain in the stomach and spine at each shock of the carriage. The spinal pain now became aggravated, and was accompanied with internal pulsations: the abdomen unexpectedly swelled, as if distended with air. This last symptom, though temporary, was the more remarkable, because hitherto the patient never complained of any painful sensation below the stomach, or in the region of the great intestine, the kidneys, or bladder, even while he suffered most severely in the neighbouring parts.

On the 20th Nov. 1833, Valetto was attacked with acute febrile symptoms, preceded by a sensation of coldness, and oppressive pain in the head. The fever was arrested by bleeding: the calm which generally followed this remedy was not now attained. Towards the middle of December his sufferings increased: the stomach refused to bear any food; he was depressed, complained of violent pulsations near the vertebræ in which the pain was usually seated, and in spite of frequent efforts was unable to throw up any matter from the stomach. The disturbance of the circulating and digestive organs was partially calmed by a copious bleeding; but the unfavourable symptoms soon returned: the epigastric region was now contracted, while the hypogastrium was hard and tumefied. After an access of very violent suffering, he threw up some liquid, inodorous, insipid matter, and then some bitter fluid. The region about the xiphoid cartilage now became the seat of a new pain; the hands and arms trembled. Towards the month of March 1834, the lower extremities became œdematous, and presented much of the appearance seen in phlegmasia alba dolens.

On the 12th May, Professor Fabris, chirurgien-en-chef to the Civil Hospital, visited the patient: he explored the state of the rectum, and found the gut very much contracted, and lined with an inodorous greenish mucus: the finger could not distinguish any portion of the bladder, and the patient seemed so fatigued from the examination, that it was not judged fit to introduce a catheter. The patient's health now declined from day to day: the tumefaction of the limbs began to decline, and at the same

time he passed a small quantity of urine through the urethra. The urine discharged was watery, nearly free from odour; sometimes he remained for several hours without passing any; at other times he excreted two pounds in the twenty-four hours. It is important to remark that he never had had either incontinence or retention of urine, and that it was never necessary to introduce the catheter, a circumstance so often required in paraplegic individuals.

At about the month of October he was again removed to another prison, in which he survived only three months. By degrees the impossibility of taking food was established; he vomited at once every liquid and solid substance as soon as swallowed.

On the 13th February 1835, the symptoms of an approaching death were visible, when a quantity of fluid feces, without any premonitory sign, was discharged simultaneously from the mouth and anus. Valetto expired thirty-six hours after this phenomenon, in the thirty-sixth year of his age, and after having suffered nearly seventeen years under this most distressing malady.

Post-mortem Appearances.

The autopsy was made on the following day, in the presence of MM. Brugnolo, Caldani, Morgagni, Fabris, Montesanto, Argenti, and Meneghini. The membranes of the brain appeared to be œdematous, but the hemispheres of the cerebrum were firm and well developed; the cerebellum seemed small when compared with the cerebrum. The vertebral canal was normal: the point in which the violent pain existed during life did not present any alteration: in the cavity was found a large quantity of sero-sanguineous fluid: the chord itself was normal. In the abdomen the stomach was found much distended, and a great deal larger than in the natural state; from the great bulging extremity to the small cul de sac, it measured eight Paduan inches and a half; from the summit of the great end to the middle of the great curvature, seven inches. It contained a small quantity of bilious and fecal fluid: its parietes were healthy; the liver adhered throughout to the diaphragm: the gall-bladder, completely empty of bile, contained about twenty or thirty calculi. The external surface of the small intestines was in many points injected, and of a brownred colour: they were contracted here and there, chiefly near the cæcum; they contained the same kind of fluid as the stomach. The cæcum, ascending colon, and a part of the transverse, were normal: from the iliac flexure to the anus, the intestinal parietes were thickened, resistant, and contracted: the inner surface was the seat of numerous ulcerations: the whole canal contained fecal matter,—in the small intestine, very fluid,—in the large, hard and dry. The liver and pancreas were healthy.

The bladder, excessively contracted, was concealed behind the pubes; its parietes were much thickened, and it contained a few drops of thick red urine; the cavity was not capable of holding more than three ounces of fluid: kidneys healthy; ureters flaccid, and a little contracted; the testicles and organs of generation healthy; the vesiculæ seminales contained a small quantity of seminal fluid.—*Annali Universali, October*, 1835.

DISEASES OF OLD PERSONS.

Clinical Researches into the Diseases of Old Persons. Made at the Hospital of Salpetrière, Paris. By M. Hourman and M. Dechambre. Archives Générales, Nov. 1835.

In a former Number we analyzed the first of these interesting memoirs. We now continue the series from the November No. of the *Archives Générales*, giving the statements nearly in the language of the authors themselves:—

The anatomical modifications, which the respiratory organs of old females undergo, are accompanied by corresponding changes in their functions. The principal belong to acts which are purely mechanical, and which give rise to what are called the "physical signs" of disease in those organs, and we shall presently see how they correspond exactly with the changes which we have before described as taking place either in the formation of the thorax, or in the structure of the lungs.

Class 1.—*Old Females with the Thorax well developed, the Flesh abundant*, &c.

We have already seen that the respiratory organs differ very slightly in this class from the healthy adult; the same is true of the functional acts; respiration is generally performed with care in these females; deep inspirations are executed without difficulty, though not quite so freely as by an adult; however, the conformation of the thorax already produces some modification in its expansion, which we now proceed to notice. In an adult female, the mean antero-posterior diameter of the chest (taken opposite the middle of the sternum) is from six inches six lines to seven inches; the transverse, at the level of the mammæ, from nine inches six lines to ten inches, and near the base of the chest, at the level of the eighth rib, from eight inches four lines to nine inches.

Now, in the old women of the first class here under consideration, we have found the antero-posterior diameter seven to seven inches six lines; the superior transverse 8.6 to 9 inches; the inferior transverse, the same

result.—We do not attach much importance to the absolute length of each of these diameters, but their relative proportion is a circumstance evidently worthy of attention; they express mathematically what has been said in the former paper on the lateral flattening of the thorax in old persons; thus we see the superior transverse diameter becoming as short as the inferior one, and nearly approaching the antero-posterior. As to the augmentation of the diameters during respiration, they take place nearly equally in all directions; but the augmentation is always much less than in the adult, never depressing more than four or five lines. Finally, the sternum, which is projected forwards during inspiration, undergoes the rotatory movement described by Haller in a very feeble degree. The chest of these aged females is sonorous, but not to an exaggerated degree. When the lungs advance, so as to cover the heart, the precordial region then becomes abnormally sonorous, and we sometimes cannot discover a dull sound over the whole left side of the chest. We can see at once how this circumstance is calculated to produce a false diagnosis in diseases of the heart or pericardium, when, for example, this accidental expansion of the pulmonary tissue has become hardened by pneumonia. Auscultation discovers a vesicular respiration, as in the adult, but it is less deep, less abundant, more large and clear.

CLASS 2.—*Old Females with a Narrow Chest, and reduced more or less to a state of Senile Extenuation.*

In proportion as the organs destined to accomplish the acts of respiration, become as it were worn out, the necessity of performing the function seems to diminish. Frequently the rhythmus of the respiratory movement is excessively irregular and unequal in such females. The thoracic parietes sometimes remain for a long period in a complete state of immobility, and then alternate, with a series of precipitate movements. It is in vain that one would endeavour "to teach them to respire." The attempts which they make to breathe regularly seem only to derange the function in a more marked manner, and instead of inspiring and expiring regularly, we see them perhaps exhausted by violent efforts that lead to no result. In the state of expiration, the antero-posterior diameter is here seven inches to 7.6 lines; the superior transverse is eight to eight inches and a half; the superior transverse seven to seven inches and a half. During a deep inspiration, they can augment the first by five to seven lines; the two last only by one, two, or, at most, three lines. We must also remark, that it often happens in this class that the transverse diameters are an inch shorter than the antero-posterior, and do not undergo any change whatever during inspiration. Hence we may already draw the conclusion, that in proportion as we advance in age, the powers which dilate the chest, and chiefly those that act on the transverse diameters, diminish considerably in force. Thus, whenever they are able to draw a deep and regular inspiration, we see the thorax elevated all in a mass, carried abruptly upwards, while the first to the last ribs ascend under the skin which covers them. In this manner we have been able to correct, on the living body, the error of Sabatier, who thought the lower ribs were carried downwards, the middle outwards, and the superior upwards. In this general movement of ascension the sternum is raised eight to twelve lines, but it is pushed forwards in a lesser proportion; fixed inferiorly by the depression of the ribs already described, and superiorly by the ossification of the first, or even second, costal cartilage, the rotatory motion of Haller can no longer be executed; nay, in some cases, the movement takes place in an inverse sense, and the projection of the sternum becomes greatest near the superior articulation.

The facility with which the chest is enlarged, either vertically, or from before backwards, is easily explained by what has been said on the persistence of the costo-vertebral articulations in aged persons. In resumé, we may conclude from what precedes, that relatively to the transverse and antero-posterior directions, the play of the chest in the old person is exactly inverse to that observed in the adult; however, there, fortunately, remains a third direction, almost independent of the osseous case; this is the vertical, and hence the diaphragm frequently becomes the principal inspiratory agent; obliged to redouble its efforts, the folds of its surface press forcibly against the posterior edge of the liver, and, doubtless, there form the deep marks before mentioned. How do the respiratory muscles act in the aged person? The space by which the ribs are separated being considerably diminished, the intercostal muscles must lose a portion of their force; however, the other muscles, though weakened by the general emaciation, act freely. We must, in this remark, except the scaleni and sterno-mastoid muscles, whose direction is changed, and whose power is nearly destroyed, by the change of form which takes place in the upper part of the person during old age. Expiration is sudden and rapid; the chest suddenly returns by one strong effort to its condition before the lungs expand; this act then is performed with more energy than in the adult; but when expiration becomes active, as in coughing, spitting, &c., then the resistance of the thorax overcomes the weakened muscular power.

The changes disclosed by auscultation and percussion in this second class of old per-

sons, are much more remarkable than in the former. The most general and striking is the increased resonance of the chest. In lungs of the third type especially, the sound is as clear as in a person affected with pulmonary empyema: this circumstance, which might readily lead us astray, if we were not acquainted with it, is naturally explained by the rarefaction of the pulmonary cells, and the dryness and rigidity of the ribs. But the results of percussion are also modified according to the different regions we examine. Thus in front, the part corresponding to the internal moiety of the clavicle, presents only a moderate degree of sonorousness, much less than we find at the anterior-superior region. This fact is precisely the inverse of what was pointed out by Laennec in the adult, and depends, 1st. On the almost constant presence of gray or black indurations at the summit of the lung. 2nd. From the great curve of the clavicle in old persons. On the other hand, from the atrophy of the mammæ, it is more sonorous in the region of those organs than in the adult. The sternal region is commonly but little sonorous, from the smallness of the lungs, which do not completely cover the bone, and from the arched form of the latter. It also results from the same disposition, that the heart, more uncovered than it should normally be, gives a sound extremely dull, which corresponds very exactly with its volume. Behind, when the scapulum, in consequence of the inclination of the body forwards, has undergone a movement of rotation, the sound is more obscure in the fossæ of the scapulum than in the adult.

Auscultation.—In old persons of the 2nd and 3rd class (see former memoir), in whom we observe the extreme rarefaction of the pulmonary vesicles, the respiratory murmur varies according as the lung approaches one or other type. In lungs where the vesicles are not yet confounded together, but elongated into an elliptical form, the respiratory sound has lost that full, deep, low character which marks the murmur in the adult person. The bruit is more diffuse; the column of air seems less pressed upon, and appears to enter large spaces. The timbre is also more clear, as if the air struck smaller and more vibrating plates of membrane.

In lungs of the third type, where several cells are confounded together, the respiratory sound is an exaggeration of the one just described; it appears as if it were bronchial throughout the whole chest, only the force and intensity of the bruit are less. Finally, when one lung becomes extensively diseased, as by pneumonia, and the functions of the other are consequently more active, the respiratory murmur acquires more uniformity, and becomes more vesicular. The resonance of the voice is also considerably modified by old age; in many cases it is so great as to resemble a true bronchophony. In some old women, whose voice is naturally sharp and high, the resonance is occasionally so vibratory and interrupted as to represent a perfect ægophony. The bronchorrhea to which most old people are subject, also gives rise to a mucous râle, more or less abundant, which is mixed with the respiratory murmur.

Connection between the Respiration and Pulse in old Persons.—Authors have spoken a good deal on the frequency of the pulse at different ages. Thus, among other observers, Soemmering and Adelon attribute 130 to 140 pulsations to the new-born child; 120 at one year; 110 at two years; 90 at three years; 80 at puberty; 70 in the adult; 60 and less in the old person. In the year 1832, MM. Leuret and Mitivié made some experiments to ascertain how far this supposed retardation of the pulse in old people was conformable to the truth, and they found that the pulse, far from becoming more slow, was, on the contrary, quicker. Their calculations, however, were made on a limited number of individuals, 34 old men, and 41 old women. As to the frequency of respiration in old age, we find nothing certain in authors. It does not appear that any researches have been made to determine with exactness that point. The experiments we made amount to 312; the women were all examined before the act of digestion had commenced, from half past six to half past seven in the morning: of these 312 individuals, 98 belonged to the first class of old persons; 214 to the second; but we were soon obliged to put on one side 57, on account of the irregularity and inequality of their pulse. There remained then 255 females, free from disease, the youngest 60, the oldest 96 years of age.

The addition of their ages gives a total of 18,760; the average being 74.33.

The sum total of the pulsations is 20,984; the average being 82.29.

The sum total of respirations 5558; average 21.79. Hence the relation of the respiration to the pulse is as 1 to 3.41.

1st. Of the 255 healthy women, 83 belonged to the first class, and here we find the following results, viz.,

Addition of ages	6195	Mean 74.64
Ditto pulsations	6673	Mean 80.42
Ditto respirations	1755	Mean 21.14

Relation of the respiration to the pulse, 1 to 3.81.

2nd. 172 belonged to the second class; and here we find,

Addition of ages	12,765	Mean 74.21
Ditto pulsations	14,311	Mean 83.78
Ditto respirations	3,803	Mean 22.11

Thus we see that both the pulse and respiration are more quick in the second class than in the first. We may draw several conclusions from the numbers just established. In the first place, the average num-

ber of pulsations in the 255 women being 82.29, fully confirms the opinion of M. Leuret as to the frequency of the pulse in old persons. It exceeds by 12 the number generally attributed to the adult, and even by 17 the average number found by MM. Leuret and Mitivié amongst the pupils at the Veterinary School at Alfort. On the other hand, if we adopt 20 as the mean number of respirations in the adult, according to M. Magendie, we find the respiration also accelerated in the old person by 1.79. Finally, if we reconsider the division made of old persons into two classes, and compare the results of each, we obtain another curious result, fully confirming what has just been said; we find that in women of the first class, *younger* by constitution than by age, the pulse and respiration are less frequent than in the second class, who, nearly of the same age (according to years), are more worn down, more decrepid, more *old* in constitution: as to the relation between the pulse and respiration, it always remained the same, *i. e.*, their acceleration was simultaneous and proportioned in both classes.

Again, by analyzing the cases more minutely, and by dividing the whole number into 6 series of from 60 to 140 pulsations, we find that in two-thirds of the old persons the pulse beat at from 70 to 89, and in one-sixth at 90 to 99. It is also curious to examine the progressive augmentation of the pulse and respiration: both these functions augment in frequency together, but the first more rapidly than the second. Let us take an example from the second class.

SERIES.	Number of Individuals.	Mean Age.	Mean of Pulse.	Mean Respiration.	Relation between the Pulse and Respiration.
Below 60 pulsations	1	79	56	24	1 to 2.33
From 60 to 69	21	78.38	64.14	18.58	1 to 3.39
70 to 79	46	74.37	74.37	21.24	1 to 3.50
80 to 89	54	73.09	83.74	22.26	1 to 3.76
90 to 99	29	74.22	94.07	25.24	1 to 3.73
100 to 120....	21	73.43	106.52	23.05	1 to 4.79

The constant relation between the respiration and pulse exhibited in the above table is very remarkable; does the same thing occur in cases where the two faculties are disturbed? To answer this question the author had only to recur to fifty-seven cases, which, as we before said, they were compelled to separate on account of the irregularities they presented; of these fifty-seven, fifteen belonged to the first class and forty-two to the second:—

The mean age of the women was .. 66.50.
Mean pulse ..... 75.17.
Mean respiration ..... 27.75.

Hence the relation of the respiration to the pulse is as 1 to 3.71; but as, in the two classes united, the numbers were as 1 to 3.41, we have a difference of 0.31 furnished by the fifty-seven cases.

The experiments from which the above calculations were drawn have been performed with the greatest care, and a desire to avoid every source of error; the observations, moreover, were made on females *all* placed exactly in the same conditions of health, situation, nourishment, &c. &c.

It remains to say a few words on the difference between the numbers now given, and those derived from the observations of MM. Leuret and Mitivié at the old hospitals.

The thirty-four women examined at *Salpetrière* gave a mean pulse of 79. instead of 82.19, which results from the experiments of our authors. However, we should remark that the pulse of the patients examined by M. Lebut never passed 100, while that of M. Hourman varied from 80 to 144. Again, of the forty-one old men examined at Bicetre, fourteen coughed; there remain then twenty-seven, who give a mean of seventy-four exactly. The same number our authors found in separating all the extreme pulsations, and it is curious to observe that M. Lebut declares he did not venture to comprise in his tables a certain number of old persons, although they appeared perfectly healthy, because the pulse presented a frequence which seemed to him incompatible with good health. How easily is the most accurate observer led astray when he allows a preconceived idea to turn him aside from the facts which are before his eyes!

ANOMALOUS CASE OF LITHOTOMY.

REMARKABLE DILATATION OF THE LEFT CAPSULE OF THE PROSTATE.

To the Editor of THE LANCET.

SIR.—If you deem the accompanying case worthy of admission into your valuable periodical, its insertion will much oblige, Sir, your most obedient servant,

JOHN LIZARS.

38, York Place, Edinburgh;
Jan. 22, 1836.

A surgeon attached to a large hospital has peculiar opportunities for improvement, and he fails in his duty if he either neglect them, or conceal the useful results of his observation and experience. Success, though it flatters vanity, is at best an equivocal proof of merit, for it may happen to the rash and unskilful. Successful cases, in ordinary circumstances, when published, afford but little information; cowardice may be unwilling to divulge the unsuccessful, but these are for the most part our proper instructors; from these we learn whether nature or art is the more to be blamed for any untoward event; but whether successful or unsuccessful, those cases are invaluable which lead to the detection of such morbid deviations as would certainly occasion the death of a patient in the hands of a timid or irresolute operator. Of this last class is the following:—

CASE.—James Brown, a healthy-looking man, fifty-nine years of age, entered the hospital on the 29th of December last, and presented the usual symptoms of stone in the urinary bladder, under which he had laboured during the last eight months. He was in this hospital seven months ago under the late Professor Turner, who sounded him, but detected no calculus. The day after his admission he was carefully sounded, but no stone was felt; the bladder was rough and fasciculated. He was ordered warm-baths, leeches to the region of the pubes, the *mistura æquæ potassæ*, the *uva ursi*, and a seton over the pubes. All irritation having been subdued by these means, he was again sounded, and a stone distinctly perceived. A dose of castor oil was administered, and on the following day the lateral operation was performed.

Operation.—All the preliminary steps having been taken, and the existence of a calculus again ascertained, a large staff was inserted, which could not be made to pass the prostatic portion of the canal. A smaller staff was next employed, which apparently entered the bladder, as its handle was loose and moveable. One of my colleagues held it over the pubes, whilst I commenced and cut down to the membranous portion of the urethra. I then proceeded, seemingly through the left lobe of the prostate gland, which was hard, cartilaginous, and studded with calcareous depositions. The left forefinger, which guided the lithotomy knife, seemed to enter the urinary bladder, and a little fluid, considered to be urine, flowed out, when I begged the staff to be withdrawn. I next inserted a pair of forceps; but instead of a calculus, such as the sounding had led me to expect, I discovered nothing but calculi, varying in size from that of a millet seed to that of a pea. I now used a searcher, but was not more fortunate. My finger felt a pouch, equal in magnitude to a urinary bladder, which contained numerous small calculi. One of my colleagues, at my request, introduced his finger, and the sensation communicated so nearly resembled that of a mucous membrane, that he suspected I had wounded the rectum, but convinced himself of the contrary by examining that viscus with the forefinger of his other hand. Another of my colleagues was also requested to examine, and he, with a scoop, removed some of the small calculi already mentioned.

I now inserted a catheter, which passed the entrance of this pouch, and got into the bladder, and urine flowed out. The catheter was replaced by a staff, along which the knife was carried through the neck of the bladder, as there was no substance like prostate gland, and a stone of the size of a flattened plum was instantly extracted.

The first incisions into the pouch occupied about one minute; the second incision, and the extraction of the calculus, about another minute. From fifteen to twenty minutes were spent in examining this pouch.

The patient has had no bad symptom—no case of lithotomy ever went on more favourably, and this is now the tenth day from the operation.

Remarks.—The anomalous pouch, which rendered this case so complex, seems to me to have been nothing more than the external fibrous capsule of the left lobe of the prostate gland gradually dilated until it became as large as the bladder itself.

Crosse, in his work on Urinary Calculus, p. 34, says, "Concretions in the prostate gland, commencing in its ducts, often at a distance from their urethral orifice, even at the very bottom of a duct, go on increasing until each duct is enlarged into a pouch, rendering an escape of the concretion into the urethra impossible; the narrow orifice by which the pouch communicates with the urethra often becomes closed in consequence of inflammation and effusion of lymph; the pouch is a secreting cavity, which furnishes additional deposit; and as the concretions enlarge or multiply, the pouch enlarges in the direction where there is least resistance,

towards the lateral or posterior surface of the prostate gland."—See plates ix, fig. 1; and xi, figs. 2 and 3.

Wilson, on the Urinary Organs, at page 353, also observes, "I have met with a urinary calculus larger than a common-sized olive, in a cavity of the prostate gland, where, from the orifice which first admitted it having contracted, or the size of the calculus having enlarged, the stone could not be pressed back into the urethra, and the whole of the prostate gland had been changed into a capsule surrounding it."

I possess a preparation in my museum with cysts exterior to the urinary bladder, one of which may hold from four to five ounces. These communicate with the bladder. I have also another preparation, where the right lobe of the prostate gland forms one capsule.

I freely confess that I was not prepared for the complication just described, nor am I ashamed to confess it, since no mention is made of such an anomaly in the writings of the most eminent surgeons, if we except Crosse and Wilson, from whose works I have quoted above, but which I had not seen.

POOR-LAW MEDICAL CONTRACTS.

STATEMENT OF PROCEEDINGS AT THE WHEATENHURST UNION, GLOUCESTERSHIRE.

To the Editor of THE LANCET.

SIR,—I consider it a duty which I owe to myself and my professional brethren, to forward to you what information I possess on the subject of the Poor-law Union contracts. An Union called the "Wheatenhurst Union," in the county of Gloucester, is just formed in my neighbourhood, and I am the only surgeon residing within the Union which comprises 14 parishes, containing a population of nearly 8000 inhabitants. I have attended nine out of the fourteen parishes for nearly eighteen years, and have great pleasure in stating that I am much respected by every class of persons, and what is more, I have professionally attended the poor in a manner which has given them entire satisfaction; I believe there is not a pauper in either of the parishes who would not serve me in any way he could. This of course is self-praise, but I state it simply to make you fully acquainted with my case.

When the Union was first formed, I attended, by invitation, as a parishioner, was introduced to the deputy Commissioner (Mr. Weale), and then stated to the Magistrates that I should offer myself as a candidate for the appointment of surgeon to the Union; and as I could not possibly fulfil the duties of the whole Union, I would divide it with a gentleman, Mr. Holbrow, surgeon, of Stourhouse, who lived within an easy distance of six of the parishes, and who had attended one of the largest parishes with credit to himself and entire satisfaction to his employers and the poor. On the evening before the day for electing the officers, I wrote to a friend and patient, a magistrate, to request he would propose me as surgeon to the Union, in conjunction with Mr. Holbrow; in answer to my note, he politely stated that he did not think I could divide the Union as I proposed, but that it would be divided into two districts on the morrow; that probably advertisements for tenders would be made in the papers, and that I had better wait and see what was done, adding, that he would take care and mention my name. In answer I begged to assure him that if such was the case, and the lowest tender was to be taken, both myself and Mr. Holbrow would decline offering ourselves.

In consequence of this, when the business came on, my friend asked if it was necessary that tenders should be advertised for, and if so, if the lowest would be accepted. The deputy immediately said that it was their usual plan; that he knew medical men objected to it, but that they always "came to." Accordingly the usual form of advertisement appeared in the county papers, and I was informed that the Union would not be divided in any other way than was announced, which was most inconvenient to us as surgeons. We therefore entered into articles of partnership, to obviate this difficulty, and then no objection could be made to the signatures to the returns.

I again wrote to my friend requesting that he would propose us as surgeons to the whole Union at a salary of 150 guineas per year, and 1*l.* for each midwifery case. There were two other tenders, the one 140*l.* for the whole, and 1*l.* for each midwifery case, the other 40*l.* for district No. 1, and half-a-guinea for each midwifery case. The gentlemen who made these offers, lived at so great a distance, that very little attention was paid to them, and I am given to understand that seventeen out of twenty of the Guardians were favourable to our election. Before, however, anything could be said, Mr. Weale got up, and stated that the salary was much higher than he could sanction, and if we were appointed, the Commissioners would not confirm our appointment; that it would be much better to have a talented young man "*from the hospitals*," for "*what could country surgeons know?*" and that the salary should be fixed at 100*l.*, including everything except midwifery, which should be fixed at 10*s.* 6*d.* per

case. The Union is fourteen miles broad, and contains 2500 paupers to be attended by the surgeon. Advertisements were again published in the country papers, and in THE LANCET (vide Number for Oct. 17), when Mr. Weale said that he should have fifty applications. The Wednesday following was again appointed for electing the surgeon, when *only one tender arrived, from town*, offering to undertake the duties of the appointment, without making one inquiry as to the extent of country, or the numbers of the poor. This person's name is Mr. FRANCIS XAVIER MOSELY, a gentleman who has practised somewhere in America. The whole ground-work of their choice was simply his public *testimonials*, no one knowing whence he cometh, or whither he goeth; and as this adventurer could not immediately become resident, I was requested to take care of my part of the Union, nine parishes, until Mr. Mosely arrived. This, sir, of course, I did without fee or reward, for upwards of a fortnight. The gentleman has now been here more than a month. *He has no instruments.* I lent him *a catheter* only a few days ago. He has no *horse*, nor any means of *conveyance* whatever, but his legs, to visit his patients. The sick are very numerous, and I have no hesitation in saying *that no man, with two of the best horses in the world, could perform the duties he has* engaged to perform; I can assure you, Sir, that I would not accept the whole Union at an equivalent salary, because I feel that I could not do my duty towards the afflicted poor, which hitherto I have ever done.

Now, Sir, I have stated the situation in which our poor are left. I am constantly harassed by their applications to me for medical relief, and how I am to act I cannot tell. I should state that the professional men in this neighbourhood are tolerably well educated, and I was myself early in attendance on hospital practice in Bath, and filled the office of house-surgeon to *St. Bartholomew's Hospital* in the year 1812. I have performed most of the operations in surgery successfully, and, amongst them, several in cases of aneurysm. I merely mention this to show, that my claim rested upon a good foundation. I have resided here nearly twenty years.

I beg that you will make use of this letter in any way you think proper, and I shall be happy to give you further information if required. The price per head, I should have stated above, is 9½*d.* per year.

I am, Sir,
Your obedient servant,
THOMAS WATTS.

Frampton upon-Severn, near Stroud, Gloucestershire, Jan. 1838.

RATES OF ATTENDANCE ON THE SICK POOR.

To the Editor of THE LANCET.

SIR,—Your remarks respecting the poor-law medical contract system, in THE LANCET of the 12th ult., escaped my perusal until within the last day or two, and observing the earnestness with which you urge the necessity for proposing some plan before the meeting of Parliament, which may tend to supersede the arbitrary, unjust, and cruel measures now adopting by the guardians of Unions, under the sanction of the Poor-Law Commissioners and Assistants, I again trouble you on the subject. The circumstances attending the position of myself and other professional gentlemen in this district, as regards the Union, are fully stated in the petition I forwarded to you on the 18th of September last. In the arrangements that may be made, a specified rate of charge per head, on the gross population of each parish, according to the last census, would be the most desirable mode (if fixed at a fair ratio) of obtaining equivalent remuneration for medical and surgical assistance to the poor. Accordingly, I have made below a calculation of the average expense per head, for the last seven years, for medical attendance on the poor of eleven parishes, attended by me for twenty-five or thirty years past. Some of the parishes are contracted for, and others are attended at so much per case, journeys as well as medicines being charged with a liberal consideration towards the rate-payers, and in no instance has the expense been complained of as greater than was just for the services rendered; and on consulting my medical brethren, it appears that the average as nearly as possible corresponds with theirs.

In THE LANCET for the 5th of December, in which you have stated that the expense for medical and surgical attendance on the criminals in the Penitentiary amounts to 1*l.* per head per annum, you have also stated that the labourers in the Unions are provided with similar attendance at the rate of from 2*s.* to 3*s.* 6*d.* per head per annum; but I may I think with correctness assert, that in no instance where Unions are contracted for, does the rate of remuneration amount to one-half of either sum; and as the precise sum offered by the guardians of the Docking Union was not stated in the petition before-mentioned, I now beg to inform you that the population of the combined parishes is 15,368 persons, full four-fifths of whom are agricultural poor, 200*l.*, or about 3*d.* per head per annum, being the amount offered for medical and surgical attendance and medicines, operations, midwifery, and trusses for hernia.

There is a circumstance also which I consider ought, in any application to Parliament, to be particularly noticed, and that is, the arbitrary manner in which guardians, at the instigation of assistant-commissioners, lop off a large proportion of the established practitioner's income, which perhaps *in toto* but barely supports his family, after twenty or thirty years' hard application and industry. Thus, if parishes *A*, *B*, or *C*, lie in a division marked out by the Board as a western division, and the person who for many years has been the attendant of such parishes, happens to reside on the eastern side of the line, those parishes are unceremoniously assigned to another practitioner who happens to contract for the western division, thus depriving the original attendant not only of his parish attendance, but, necessarily, of a large portion of his casual private practice, owing to his not visiting such parishes so frequently as when in attendance on the poor; and this is done merely in order that the relieving officer may receive certificates of the health of paupers, from the surgeon of his division, although the fact that no inconvenience can arise from the circumstance of the medical man and the relieving officer residing in different divisions, is proved, by the regularity and facility with which certificates have been forwarded, notwithstanding the various parishes have as yet continued to be attended by the original medical practitioners, owing to medical officers not having yet been appointed, partly by reason of their refusal to comply with the terms offered, and partly from the existence of private contracts with the different parishes not terminating until Lady-day next. I am, Sir, most respectfully, your obedient humble servant,

EDWARD MANBY.

East Rudham, Norfolk, Jan. 20, 1836.

The following is the table above mentioned. The contract in the first seven is for medical attendance, cases of surgery and midwifery being charged for exclusively, but included in the average sum stated per head. East Rainham is six miles distant. Nos. 8, 9, 10, and 11, are attended, per case, at the sums stated per head.

	Average per head. s.	d.
1. East Rudham	0	7¼
2. West Rudham	0	8½
3. Harpley	0	8¼
4. East Rainham	1	7
5. Houghton	1	2
6. Bircham, Great	0	8
7. Bircham Tofts	0	11½
8. Syderstone	0	8
9. Gatesend	1	11½
10. Banner	1	11
11. Bagthorpe	1	3¼

ANNUAL ELECTIONS AT THE COLLEGE OF SURGEONS IN IRELAND.

To the Editor of THE LANCET.

SIR,—The fidelity with which you, from time to time, give publicity to the political affairs of the Royal College of Surgeons in Ireland, encourages me to trespass on your valuable columns with a brief statement of the proceedings of this extraordinary corporation on "Hansel Monday."

That being the day fixed by charter for the election of officers for the ensuing year, the Tory party, of black-balling notoriety, mustered all their forces, in anticipation of strong opposition from the reformers. But what, think you, must have been their astonishment when the hour of contest, one o'clock, had arrived, without a single member of *genuine* reform principles having appeared in the board-room, the supposed arena of party conflict! No, not a Peter-street, nor a Richmond-man, nor a liberal from *any* quarter, was to be seen on that eventful occasion! It may be asked whence the cause of this apathy? Have not all members of the corporation an equal interest in its prosperity, and are they not all equally bound to maintain its stability? Nothing can be more fair, nothing more rational, than that such a question should arise in the minds of impartial persons at a distance, who are but little acquainted with the internal workings and perpetual intriguing of the predominant party in this immaculate body; but in the estimation of those who are well informed on the subject of College politics, the liberal party must stand acquitted of any neglect of duty, on the score of absence, on the present occasion. They have, over and over again, endeavoured to assert their rights and establish liberal measures, with a view to keep pace with the spirit of the age, and thereby maintain the respectability of the profession; but no sooner were the doctrines of liberality and fair play sought to be introduced into the proceedings of the College, than that ever-fertile note of dissention, in this unfortunate country,—that tocsin of discord,—"the No-Popery cry,"—was sent forth by that imp of bigotry and intolerance —JACOB, who, in accordance with the enlightened views of his worthy coadjutor in intrigue, CUSACK, resolved on a plan for black-balling every candidate for membership, who might be suspected of entertaining either liberal opinions or just views of passing events. The machinations of those narrow-minded individuals, however ill-judged or base they may appear to men of honest views, have, nevertheless, so far

succeeded in converting the College into a species of *private or party property*, that any efforts from the most active band of reformers to preserve the corporation from total and deserved subversion would prove unavailing. They have tried the experiment repeatedly, but in vain: the seeds of bigotry and selfishness have become too well matured to be uprooted by "the faint but fearless men," who have been left to fight the battle of independence. They now rely, with confidence, on the exertions of Mr. Warburton, for the final settlement of a question with which he is so well acquainted.

Well, Sir, "the loaves and fishes" of place and corporate honours were quietly left to the disposal of the monopolists, who, I need scarcely tell you, acted most generously towards themselves. Out of twenty-two *officers* who were elected, there is not *one* before whose name a conscientious man would venture to prefix the significant adjective *independent*; and, with two exceptions, their "honours" cannot, in any station of society, lay claim even to a character for excessive respectability. By way of elucidation, I beg to apprize you that a Mr. Frank White is the new President, and a more fitting personage could not possibly be placed at the head of such a corporation! He is endowed with the convenient powers of the chameleon, and adapts himself to circumstances, by assuming for the time being the political hue of *any* party which may be rendered available to his own personal interest. In accordance with this judicious rule of acting, he is, in collegiate affairs, a boisterous supporter of every monopoly and abuse which selfishness can suggest; whilst at parochial meetings he deems it expedient to play the part of the poor man's advocate, and in this way attract attention, thinking that he excites the admiration, of the humane part of the community. As a general politician, he *says* he is a reformer, and, in confirmation of this assertion, he stated to the liberal Chairman of the Parliamentary Medical Committee that he had been most unjustly excluded from the Surgeoncy of *Steeven's Hospital*, solely on the grounds of his being a Roman Catholic. However, not having much confidence in his own word, on a very recent occasion, he felt it necessary, when putting forward his claims, supplications, and lamentations, to the present Government, as a candidate for the situation of surgeon to the *Richmond Hospital*, to transmit to his Excellency Lord Mulgrave, an *affidavit* confirmatory of the truth of his original statement to Mr. Warburton! I wonder what does his Protestant brother, the Town-Major, think of this line of proceeding,—he who was converted at the "altar of Hymen," on the *faith* of the late Dr. Blake's money, from the errors of Popery; and, at the same blissful moment, embraced bride, purse, and Thirty-nine Articles!

> "Quid non mortalia pectora cogis,
> Auri sacra fames!"

Lord Haddington had, I am sure, no idea that the incessant follower and sycophant of *his* Government, Surgeon White, had suffered so much temporal punishment by his superstitious adhesion to the "idolatrous doctrines of the Church of Rome." Oh! religion, how much is thy sacred name abused!

And who is the Vice-President for the ensuing year? No less a personage than Mr. White's congenial partner and co-operator in College affairs—THE REDOUBTED ARTHUR JACOB! Yes, Sir, such is the almost incredible fact. WHITE and JACOB are really the President and Vice-President of the Royal College of Surgeons in Ireland! *Arcadis ambo!*

> "Ah! sure a pair was never seen
> So justly formed to meet by nature."

I forget the next line, but *quis istos separabit*. JACOB, the vulgar buffoon, whose discursive and disgusting harangues are composed of gleanings from the fishwoman's vocabulary, and the resurrection-man's glossary,—he who is the *avowed* advocate of black-balling bigotry and monopoly,—the Conservative champion of every corporate abuse,—he who made such an exhibition before the Parliamentary Medical Committee; and yet, on a late occasion (acting on the supposition, no doubt, that the evidence given by the Irish witnesses would never be published), had the effrontery to state at a public meeting of the College of Surgeons, that he was "*the man who told the arch-reformer, Warburton, to his teeth, the absurdity of his attempting to put down or interfere with the Irish College of Surgeons*,"—such is the individual who has been elected Vice-President of this once respectable body, which is now dying a natural but a most ignominious death. I remain, Sir, your most obedient servant,

OBSERVATOR SECUNDUS.

Dublin, January 15, 1836.

LATE ELECTION AT THE RICHMOND HOSPITAL, DUBLIN.

To the Editor of THE LANCET.

SIR,—It is much to be regretted that such an illiberal religio-political tone, as has of late distinguished more or less many of your Irish articles, should have found its way into the pages of THE LANCET: this can never have been intended by the Editor, whose exertions, I am convinced, are honestly directed towards *general* improvement, *general* utility, and the interests of science. Such

a temper may gratify, as it would appear to be the result of, sectarian bigotry, but it holds no kindred with the better feelings of the majority of the profession. It proceeds from an ungenerous and uncandid minority, distorting facts, in order falsely to enlist public feeling on their side, and forward their own selfish interests and bigoted sentiments, without regard to the evils which will unquestionably ensue from such proceeding, viz.:—1. The splitting of the reform party; the Protestant portion of which cannot be expected to co-operate with those, who, under the mask of medical reform, would advance the interests of political-religious fanaticism; and 2ndly. The creation in *good earnest* of similar feelings in the opposite party, which, I am happy to say, have at present their chief seat only in the jealous and excited fancy of your correspondent. Why introduce into a medical journal at all, the exciting subjects of politics and religion? Most urgent indeed should be the occasion to justify such proceedings. Surely the medical profession at least should be the happy neutral ground, where men of science and philanthropy (though belonging to all sects and parties) might meet on equal terms, free from the rancour of those distracting topics. The medical profession is not, nor should it be, political: the terms religion or politics should never be heard in the pursuit of medical science, or the distribution of its honours; and he is but an ill friend to the profession or to science, who will persist in flinging this apple of discord among the members of the one or the cultivators of the other.

It *may* be quite true that the majority of medical appointments (such as they are, and God knows they are few and shabby enough) is held by Protestants; but it is to be remembered, that until of late years, there were very few of any other persuasion in the medical profession (and even still they form a vast majority), while the patronage was vested in persons of the same creed, they forming the bulk of the respectable classes and the *subscribers*,—subscriptions very generally conferring proportional influence. Thus what is selfishly objected to by a few, for reasons easily divined, followed *naturally* from the condition of things, without any party malevolence or exclusive bigotry whatever, which in truth were never expressed or felt.

Nor is the profession at this day conducted in that hostile feeling your correspondent insinuates (unless indeed the exertions of him and the party to which he belongs shall engender it). Individuals of course there are, who are as bigoted as the most infuriate Tory or Radical could desire, but neither the College of Physicians nor the College of Surgeons, *as a body*, enter into any such sentiments. The latter, from having no connection with the University, is more especially free from politics and religion, and it is its boast, that, as a body, it has never taken any step in the spirit of either. The fact is, the party who in that body exercise such a pernicious influence, and have metamorphosed a public institution into a private school job, maintained in ill condition, at the public expense, to the exclusion of every thing else, prefer money to religion or politics either; and they look only to the medical reform sentiments of those they wish to promote: thus their president and several others of the officers are at this moment Roman Catholics, and some of the hottest College partisans belong to the same creed, while the claims of Protestants are disregarded, because they are reformers. So little does religion or politics prevail among the thick-and-thin "College men," that the Chief among them, Cusack, Jacob, and Harrison, have alternately figured as Conservatives, Liberals, and Radicals, and at this moment the public neither knew, nor perhaps care, in which corps to class them.

Why then object in such unmeasured terms to the recent government appointments to the *Richmond Hospital?* Oh, but Mr. Adams is a Tory! He never gave any evidence of any such sentiments. All that the public can know, or indeed is to be known, on the subject, is, that he *professes* the established religion; and is this to be a bar against all promotion? Truly this is one-sided liberality with a vengeance!—I do not wish to be the vindicator of Lord Mulgrave's Government, but I must say that all but prejudiced bigots must see, that in this case, at least, he acted properly, not only for the advantage of science and the Institution in question, but also for the interests of that party which gives such obliquity to the optics of "Observator." 1st. It would be easy, but not very gracious, to demonstrate not only that Mr. Adams was by far the fittest person in "Observator's" list, for the vacant office, but that none of the others were actually adapted for the position they had the impudence to claim. And, 2ndly, By the promotion of Mr. Adams, *two* appointments were vacated; one of which was at once conferred on Mr. Cholera White, an ultra Roman Catholic,—and the other, "surgeoncy to the *Jervis-street Infirmary*, which leaves an appointment for another Roman Catholic in that Institution. I say nothing of the appointment of Mr. M'Donnell, as I presume that he cannot be objected to, inasmuch as his sentiments are as much opposed to an established religion, and his politics are as extreme as those of any Radical of them all. Further than that, Mr. Carmichael could not have had any "jobbing understanding" with him, as the appointment was made out while Mr. M'Donnell was in Paris. I may also add, that the arrangement did not *originate* from the Commissioners; they were merely consulted as to the propriety of the

appointments, which originated at once from the high-minded and disinterested conduct of Mr. Carmichael; and the discrimination of the Government appointments, considering the difficult circumstances in which the executive were placed, have given to all reasonable persons general satisfaction.

Thus, notwithstanding "OBSERVATOR's" assumed facility of quotation from the contents of Lord Morpeth's bureau, he has exhibited more political bias and personal invective, than candid criticism and independent judgment.

I rely on the integrity and liberality of THE LANCET for insertion of these strictures, and am, Sir, your obedient

REFORM AND FAIR-PLAY.

Dublin, Jan. 15, 1836.

*** We shall probably make some remarks on many unjustifiable statements in the foregoing letter on an early occasion.

LATE ELECTION
AT THE
RICHMOND HOSPITAL, DUBLIN.
LETTER FROM MR. CARMICHAEL.

To the Editor of THE LANCET.

SIR,—In your last number (16) is an article headed "Late Election at the Richmond Hospital, Dublin," in which your anonymous correspondent was pleased to make the following observation: "As to Mr. Carmichael's prowess as an intriguer, I don't think it necessary to add one word beyond what has been already stated, namely, that he has been *induced*, within the last few days, to resign a post of honour on conditions best known to himself."

I acknowledge that I have been *induced*, on considerations best known to myself, to resign the situation in question, but very different from those considerations which your correspondent so broadly insinuates. I resigned my situation of attending for that of consulting surgeon, because by doing so I secured the appointment of two gentlemen, whose long connection with the hospital, and well-tried competency and worth, had been fully established; while, by the arrangements that have been subsequently made, I shall still continue my visits to the hospital, where there are wards allotted to my superintendence, affording me an opportunity of continuing my course of clinical lectures as heretofore.

These are the only considerations which induced me to resign "the post of honour" in question, but which I apprehend your correspondent, being one of that class whose grovelling nature cannot comprehend the motives of a disinterested action, is totally incapable of appreciating. Feeling the stings of a disappointed candidate, he was also, no doubt, the author and instigator of those observations which appeared in the *Freeman's Journal* of the 23rd of December last, containing a similar insinuation, and to which, on the 28th of the same month, in the same journal, appeared the reply underneath, which I beg you will have the goodness to re-insert in your publication, as containing the most decided denial that on my part I can give to those vile insinuations, thus maliciously disseminated, but which it would be quite unnecessary to make to the profession here, or to those acquainted with me.*

One word more and I have done. The appointment of Mr. Adams is objected to on political principles; your correspondent calls him "an avowed Tory."—I never heard any but liberal sentiments from Mr. Adams on political subjects; and as to Doctor M'Donnell, the most sanguine reformist, if rational, might be satisfied with the liberality of his political opinions. But what have politics to do with medical or surgical appointments to charitable institutions? May not an hospital or a medical school be as well served by a Conservative or Protestant, as by a Radical or Roman Catholic surgeon? I for one have always deplored the existence for so many years of a religious monopoly of the places under Government. Does your correspondent wish for a continuance of the principle of religious monopoly, but under a change of sides? We can never expect peace or prosperity in this unhappy country, until a man's religion ceases to be a consideration with those upon whom all patronage depends.

In conclusion, as I feel that I might have declined answering the attacks or insinuation of an anonymous traducers, I shall close this correspondence by stating my determination not to notice any further communication on the subject, unless under the real signature of the author. I have the honour to be, &c. &c. &c.,

RICHARD CARMICHAEL.

24, Rutland-square, Dublin,
January 16th, 1836.

* "*To the Editor of the Freeman's Journal.*

"SIR,—Having seen in your paper of last Wednesday, an article headed 'The Richmond Hospital,' in which there is an insinuation that I was influenced by 'a pecuniary consideration,' in the steps I have taken with the view of resigning the appointment I hold in that hospital, I beg to assert, in the most decided and unequivocal terms, that this insinuation is utterly and in every point of view unfounded; and that I have proposed to make this sacrifice without any other motive than to promote the permanent prosperity of an institution to which I have long been devotedly attached, and with which I hope, however unprofitably to myself, to be still professionally connected as long as I live. I fully acknow-

MIDDLESEX HOSPITAL.

To the Editor of THE LANCET.

SIR,—Permit me to trouble you with a few observations on a letter respecting some abuses at the *Middlesex Hospital*, which appeared in the last No. of your journal, and which, as far as the somewhat vague and incoherent tenor of its expressions permits it to be intelligible, is the production of a medical student of *King's College*.

The writer, after briefly noticing the small number of pupils in attendance in the practice of the hospital, which he attributes to the scarcity of interesting cases, proceeds with remarkable consistency to a slightly different cause of complaint; viz. the inconvenience that he suffered from too numerous a body of spectators, who assembled to witness an important operation. And I readily admit, that at the time in question the theatre was excessively crowded, and that many gentlemen from the medical schools in the vicinity were naturally enough attracted by the interest of the occasion. But, on the other hand, I am sure that there was not one person who had any right to be there, that might not have gained admittance into the gallery, or into the area of the room, whilst among the numerous body of spectators, there was not observable the least species of indecorum or confusion; but every gentleman present appeared perfectly ready to give way at intervals, that those behind him might enjoy a better sight of the operation. And surely it is unworthy of the liberality of a correspondent of THE LANCET, to wish to seclude any persons from the advantages derivable from a public hospital, simply because they have not, like himself, been seduced into attendance; thus I have not gratified, by an exorbitant fee, the fraudulent extortionary of its governors or functionaries.

But whatever just cause for complaint the writer might have had in this particular, is now for the future removed; and I would merely, as a fellow-student, ask him in conclusion, whether, by an application to the medical officers, he might not have attained his purpose just as effectually, and infinitely more honourably, than by condescending to an anonymous tirade in the columns of a journal, which has invariably attacked our College and its professors with the most unreasonable and malignant hostility.

I remain, Sir, your obedient servant,

ROBERT DRUITT.

King's College, London,
Nov. 17th, 1835.

*** The date of the foregoing letter will show that it was written long since, although it only now appears in print. We beg to assure our correspondent that the delay in its publication was wholly unintentional. The letter must have been mislaid immediately on its receipt, for on turning over some papers it has but this moment met our view. Apologizing to Mr. Druitt for the accident, we render to him, by its insertion forthwith, the only reparation which it is in our power to offer in the form of compensation for the oversight. By-the-by, does our correspondent really feel justified in speaking of that hostility as "unreasonable," which is exercised against the bad features of an institution which was expressly erected as a barrier to the progress of a free and unfettered system of medical education,—or which it may offer to the power and influence of men who have invariably exercised the bitterest and most uncompromising feelings of enmity towards the existence of an independent medical press?

MEDICAL MAGNETISM.

To the Editor.—Sir,—To you my best thanks are due for the promptness with which you gave insertion to my last letter on the mineral magnets, although it could not have reached your hand much before the eleventh hour. In the contents of that letter I am not aware that I so far forgot myself as to transgress the usual rules of courtesy observed by one gentleman towards another. If any part of my letter will bear such a construction, it was quite unintentional on my part; and if the common object which we both profess to have in view, be a simple and honest inquiry after truth, I am quite at a loss to account for Dr. Schmidt's most unwarrantable assignment of motives to me, which a moment's sober reflection would have taught him to condemn in any other person.

In the first place Dr. S. accuses me directly with bringing forward great names with the dishonourable intention of crushing him. Now as Dr. S. has so repeatedly stated, and with great truth, "that one fact is worth all the theories in the world," why does he not bring one, even one well-authenticated fact, forward, and at once overturn all the previous theories of mineral magnetism? But no; for several months some of the most respectable of our hospitals have been offered to him to try the curative powers of the magnets, and I will here hazard an opinion, from what I know of the gentlemen in the medical charge of those institutions, that not one of the doors of those places will be shut against him if he applies for admission with the above intention. What are we to infer by the non-production of such?

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ledge your right to advocate the interests of a friend; but surely you had none whatever to attribute, without the shadow of a reason, a gross instance of moral misconduct to another.—I am, Sir, your very obedient servant, RICHARD CARMICHAEL.

"Rutland-square, Dec. 24, 1835."

Next, Dr. S. surely, as a man of honour, cannot designedly have distorted my account of his selection of the amaurotic patients at the infirmary. It must be from his not knowing our language sufficiently. My words are, "That from eight cases of amaurosis Dr. S. selected four of the most favourable for the magnets," which statement Dr. S. has changed as follows: "Mr. D. says that I selected four cases as favourable for the magnets." If this be wilful, I leave your readers to draw their own inferences. Next as to his admision that cold would produce those physiological effects, I hope your readers will mark the time when it was was made,—not in the *Westminster Medical Society*. No. Dr. S. sat very quietly on Saturday the 12th of December, and heard Mr. H. Thompson enter fully into the physiological effects produced on the four amaurotic patients at the Eye Infirmary, and on one at the *Westminster Hospital*. No, nor even at the infirmary, until the bar of iron was on the table before him; then it was, indeed, that Dr. S. said that cold might produce the physiological effects which Mr. T. in Dr. S.'s presence ascribed to mineral magnetism, as recorded in the minutes of the *Westminster Medical Society*. Had this tardy admission been made in the above society, where probably it ought to have been made, I should not now, as before, have occupied that space in THE LANCET which might be much more profitably filled with other matters. And as to the opportunity which Dr. S. refers to as not having occurred to correct what he admits to have been a mistake, I am sorry to say that the opportunity did occur on Saturday, the 19th of December, but that no notice was taken of the matter. With regard to Dr. Faraday, I have had the honour and pleasure of knowing that gentleman for the last dozen years, and he requested me as a favour, and certainly not a very great one, to state in the *Westminster Medical Society*, himself not being a member, that it was without his permission or authority that his name had been used in support of the mineral magnets, and also his decided disbelief in the physiological or curative powers of the magnet; that in order to satisfy his mind as to the former, he had some years ago allowed a Dr. Kiel to try his magnets in every way he thought proper, on himself, but that no effect whatever was produced; and as to my friend Dr. Ritchie, all that heard his views of the magnets and their powers, at the *Westminster Medical Society*, on the 17th instant, will be able to form a pretty correct estimate of the virtues of the mineral magnets. I remain, Sir, your most obedient servant,

ROBERT DAVIDSON.

23, Parliament-street, 19th Jan. 1836.

THE LANCET.

London, Saturday, January 30, 1836.

FROM among several additional communications on the subject of medical contracts in the Poor-Law Unions, we have been able to find room this week for only two letters, both of them interesting, and one of them, in many respects, of great value. The exposure of the circumstances connected with the contracts which have been effected by the Board of Guardians of the Wheatenhurst Union, with a Mr. MOSELY, will make a deep and lasting impression on the public mind. The particulars of this contract shall be stated in Parliament, for the edification and gratification of the advocates of the "amended" poor-law system.

So, then, it is absolutely come to this, that *all* the resident practitioners of the district are to be kicked aside to make room for one person who introduces himself to the notice of the guardians, by an answer to a public advertisement! If the surgeons of this country can submit to be thus treated, without having their feelings excited to the highest degree of indignation, they are undeserving of any other fate than that which must ever fall to the lot of men who are destitute of the courage to assist and maintain their rights and independence.

Something, however, in addition to contempt and anger, is requisite, in order to destroy the existing evil. The medical practitioners of this kingdom are called upon, in vindication of their privileges, to act on this emergency as one body. They must unite, co-operate, and employ their influence, both in and out of Parliament, for the purpose of casting off the infamous and degrading yoke which presses on their necks.

It is useless, as we have already stated, to apply to the Legislature, unless the application is sustained by the production of a plan which will infallibly carry with it the

general sanction of the medical body. The course of procedure, therefore, ought to be as follows:—

A public meeting of the profession should be held in the Metropolis soon after the meeting of Parliament.

At that meeting the principles on which a new medical contract system might be founded, should be discussed and determined.

A Committee of Management should then be chosen, the members of which should be empowered by the general assembly to prepare the draft of a Bill for correcting so much of the Poor-Law Amendment Act as relates to the medical treatment of the parochial poor in England and Wales.

A measure thus framed would be carried into Parliament under the most favourable and encouraging auspices. It would be upheld by the acknowledged sanction of one of the most powerful and influential bodies of men in the empire, and, accordingly, it would receive the respectful attention of a majority of the members in both Houses of the Legislature.

If some such plan as this be pursued, success will be inevitable, and the triumph of medical practitioners over their unfeeling and low-minded persecutors will be complete and final. On the other hand, if the cause of the poor and the profession receive only the disconnected support of the friends of humanity and the profession in the House of Commons,—the abettors of the Poor-Law Commissioners, and their hireling assistants, will continue to rejoice in the perpetration of their iniquities. Neither must the surgeons who reside at a distance from the Metropolis, consider that this question is regarded by the medical practitioners of London, as one which affects, exclusively, their brethren of the counties. Even if the Unions were not forming in and about London, assuredly the *esprit du corps* of the medical body would make every surgeon and physician in England sympathize and take part with those among their brethren who have been subjected to the insults of mercenary, low-minded guardians, and overbearing, illiterate assistant-commissioners. The fast-spreading Unions have made what was at first regarded only as a local evil, one of a very general, of even a national operation; and as the new system has been introduced into some of the metropolitan and suburban parishes, the practitioners of London cannot but feel that they are not one iota less interested in the annihilation of the existing abuse, than are those who reside in the smallest of our most distant towns. It is, therefore, in short, the spirited resistance of the legally-qualified practitioners of all England and Wales to an obnoxious and iniquitous law, which robs the profession of the just reward of their exertions, and at the same time increases, in a tenfold manner, the sufferings of the necessitous poor.

We have hitherto refrained from offering an opinion on the possibility of any of the plans for improving the contract system which have been submitted to the consideration of the profession. We have ever felt that the subject is one of very great difficulty, and that the adjustment of the numerous obstacles which are obtruded on the attention of the profession, is a task which cannot easily be executed. Owing, however, to the praiseworthy exertions of our very able correspondents, the subject, in all its bearings, can now be viewed under a much less obscure aspect than that which marked the outset of the inquiry. Still, it is possible that the scheme of no one gentleman who has yet written on the subject, will appear to be altogether unobjectionable to a large number of the profession. In agreeing, therefore, on the principles, and in arranging the details for securing the maintenance and working of those principles, it is very probable that a selection may be advantageously made from several of the schemes which have been laid before the profession. It is to be hoped, therefore, that the investigation of the subject will

still be prosecuted with assiduity, and with an earnest desire on the part of every person who may engage in the investigation, to adopt—in the absence of producing what may be regarded as a wholly unobjectionable arrangement—one that will be productive of the greatest number of advantages, with the fewest inconveniences, and calculated to afford to the poor the requisite medical aid in all cases of accident and sickness.

But who is to begin? Who is to make the first movement in this important undertaking? There is a trite and homely saying, that "What is every body's business is nobody's business." We are thus induced to advert to the initiating part of the proceedings, because, in consequence of a vote of the *Provincial Medical Association*, at its late meeting at Oxford, Mr. RUMSEY, of Chesham, was appointed to collect information relative to the contracts, and it seems proper therefore that the preliminary steps for convening a meeting of the profession in the Metropolis should be taken by that gentleman. It ought therefore to be known whether Mr. RUMSEY would consider himself justified in taking such a course, and whether, in point of fact, he is willing to engage at once in the undertaking. We hope, therefore, that that gentleman will at once state whether he is disposed to act on this suggestion, and whether he deems the holding of a public meeting a desirable and necessary procedure. As the accredited and chosen officer of the *Provincial Medical Association*, it appears to us that Mr. RUMSEY is, of all men, from the very position that he occupies, the best qualified for immediately taking measures to secure an aggregate meeting of the profession in the Metropolis. At all events it should be known, without delay, whether Mr. RUMSEY is prepared to make the primary movement towards accomplishing so desirable an object.

As it is of the utmost importance that all doubt and uncertainty relative to this movement should be set aside, Mr. RUMSEY will, we are certain, excuse us for thus specifically alluding to him; and we are equally convinced that he will, without hesitation, announce to his professional brethren whether it be, or be not, his intention, to take prompt steps towards convening a preparatory meeting in the Metropolis. Whatever is done must be executed *quickly*. A bold and determined course must be pursued. There must be, as we have already stated, a general co-operation on the part of the profession. Otherwise, not the slightest benefit can be secured. If the power which can now be exercised by the Poor-Law Commissioners, their Assistants, and the Boards of Guardians, over the interests of medical men, and the welfare of the poor, be permitted to outlast another Session of Parliament, the influence of the medical practitioners of this country will henceforth be treated *as nought*, and wholly disregarded by every insolent and ignorant jack-in-office. On the contrary, if the existing law be amended, through the well-directed and honourable exertions of the members of the medical body, it will be a most happy illustration of the application of a power which the Ministers of the Crown will, on all future occasions, feel ought to be appreciated and respected.

AN attempt has been made to depreciate the character and importance of the great meeting of medical students which was held the other day at the *Crown and Anchor* in the Strand. The abortive effort has experienced a signal failure, as it is well known that the proceedings of that excellently conducted and temperate assembly have produced an electrical effect within the walls of the whole of our medical corporations. The students, with a noble and manly bearing which reflects upon them the greatest honour, have resolutely affirmed that they are prepared to have their attainments in the science of medicine tested by an im-

partial public scrutiny. The last, the *only* pretence for conducting examinations for medical diplomas and license to practise medicine is GONE, is FOR EVER ANNIHILATED. Now that the hundreds of students who assembled the other evening, have become acquainted with the calumnies,—the unfounded and infamous calumnies,—which have been uttered against themselves, at a moment when they were directing their minds to the accomplishment of objects in which their own best interests, as well as those of the community, were involved, they are furnished with tolerably correct demonstrative evidence of the intentions of the writers who systematically favour this journal with their slanders, because we have ever attempted to protect the interests of the students, not only in our medical corporations, but in the whole of the "recognised" schools. Whatever may be said by the dirty hirelings of the press, the students have the satisfaction of knowing that by their judicious and sensible conduct on Monday sennight, they will henceforth be shielded from personal insult, and the intrigues of private malice, in the halls of our medical corporations. Never was there made, in honour of the science of medicine in England, a more glorious announcement than the circumstance that the medical students of the Metropolis of the empire, court an examination into the extent and character of their acquirements, in the presence of the experienced members of the profession and the public. Again and again we fearlessly repeat that that honest declaration will effect the irretrievable downfal of the system which has hitherto been upheld by the incorporated monopolists, to the unmitigated persecution of the students, and the gross delusion of the public. The common characteristic of the existing system is that of FRAUD. The students desire to substitute for it one of FAIRNESS and PUBLICITY. They have boldly encountered a many-headed monster, and have all but succeeded in vanquishing their wily and cowardly foe at the very outset of the contest.

A CORRESPONDENT sends us word from one of the colonies in which emancipation of the "slaves" has been effected by the late proceedings of the Legislature, that the decision which accomplished the first step, in giving freedom to that large body of human beings, has, to use his own words, "almost ruined the *Medicos*" in that and other islands. The incomes of several have been "cut down to half" of what they were. In one instance, "a physician who attended the estate of a titled 'proprietor,' on which were 445 slaves, has had the diminution effected by the following event,—a sample of the rest. The estate was overpeopled, but by law the proprietor was obliged to find medical attendance for all on the estate. On the 1st of August 1834, being free, the slaves had no further claim on the owner for medical aid, and, consequently, as he now employs only 150, that number being enough to cultivate his property, he only requires the attendance of a medical practitioner on 295. The philanthropists and Buxtonites, or the people of England, find medical attendance for the emancipated unemployed individuals who were formerly slaves. Two-thirds of the estates on the island were over-populated, and do not now employ one-third of the former number, and for these only does the law compel the proprietors to find medical attendance. If an epidemic cholera," he adds, "were to visit Antigua, what devastation would ensue! Who would attend them?" We answer, that the country which so long allowed the black population to be employed as "slaves," is in duty and humanity bound to take measures which would render to the sufferers efficient medical aid. We hope that the lament for the loss of "practice" is not unaccompanied by a feeling, in the "emancipated" islands, that the great Creator suffered so many scores of thousands of human beings to be brought into existence for some other and higher object than that of simply becoming sources of large income to medical practitioners.

MEETING AT THE CROWN AND ANCHOR.

Mr. George Darby Dermott does not, it seems, like the appearance in *print*, of the incoherent stuff which he delivered at the *Crown and Anchor Tavern* on Monday evening, the 18th instant. For once, we like his taste. Having referred his letter to our reporter, we insert below the statement of that gentleman on the subject. Mr. Dermott is, probably, the only man at the meeting who does not know what he said, and what was done, on that occasion.

To the Editor of The Lancet.

Sir,—It is, I believe, generally understood to be the bounden duty of those who undertake to furnish the public, through the press, with details of what takes place at public meetings, to give, as far as they can, a faithful report. Nor is it less to be expected that personal differences should never obtrude themselves to the detriment of the common object.

It has been my lot to oppose you through the instrumentality of the public press; and perhaps on that account I need not be astonished at your availing yourself of any opportunity that might offer, of bringing an opponent into contempt with the public and the medical and surgical profession. And having made these preliminary remarks, I proceed at once to designate the report given in your Lancet of Saturday last regarding myself as for *the most part false*, and concocted for no other purpose than that of venting a miserable spite on an individual, simply because he had been opposed to you on a former occasion; and while I express the utmost contempt for that report, as well as the malevolent spirit which gave rise to it, I cannot but feel astonished that you can imagine that the public will not see through the paltry motive that ushered such a production to the light of day.

I had no other motive in attending that meeting, than the substantiation of any charges, well founded, that might be made against the Examiners of the Apothecaries' Hall Company, on the ground of having rejected a man competent to enter on the practice of his profession; and this you have construed into, or represented as, holding up my hand against a resolution proposed by the friends of medical reform,—*which I never did.* You have accused me with the false orthography of using the word "*collusion*" instead of collision, which I deny.

My motive was to act in a fair and gentlemanly spirit towards gentlemen who could gain nothing by rejecting a fit candidate for their approbation, and in accordance with it I endeavoured to get a hearing with the view of proposing a resolution.—"That an address should be sent up from the meeting then assembled to the Apothecaries' Company, requesting that the rejected gentleman should be forthwith examined publicly." This I was prevented from proposing to the meeting by the Chairman, consequently it did *not "fall to the ground"* in the sense in which you imply.

It is too much to anticipate that you will insert this letter in your publication; nevertheless the mind of the public and the profession shall be disabused through other sources of all error on this subject, by

G. D. Dermott,
Theatre of Anatomy and Surgery,
Gerrard-street, Soho.

To the Editor of The Lancet.

Sir,—In returning at the earliest moment the letter of Mr. Dermott, I feel no hesitation whatever in acknowledging that I reported the speech which was delivered by that gentleman at the *Crown and Anchor* on the 18th inst., and I assert most positively that it was taken by me in short hand, *verbatim*. Further, on comparing the printed speech in The Lancet with my notes, I find that you have inserted it in your journal word for word, and syllable by syllable, as it was sent to you in manuscript. I am, Sir, your obedient servant,

Robert H. Tolcher.

Prospect-place, Deptford,
Jan. 28th, 1836.

P.S. With regard to the word "collusion," I beg to say that I took down the word strictly according to its sound. *Collision* might have been meant, but that word seems to me to have no connection with the context. Writers generally say collusion *amongst*, and collision with, and "amongst" was the next word used by Mr. Dermott.

INTERCEPTED LETTERS.

"Dear Sir Benjamin,—Inform M'Cloud that I am anxious to know the precise state of our journal. Let him be explicit, for I am prepared for the worst.

"As any interview of mine with Mr. Spring Rice at this moment would rather injure our cause, it will be necessary for you to discover some channel by which you can have access to him in the character of a *liberal*. Perhaps your radical brother could help you, but you must take care to conceal

from him your real objects, as all the liberal party are determined to make a stand on this occasion, and model the Metropolitan University according to their own notions.

"I regret extremely to hear so bad an account of your new school in Kinnerton-street, though I am not altogether surprised that you have met with a strong opposition, and that you have been unable to get men of reputation to join you. Your sincere friend, H. H."

"May Fair, Dec."

"DEAR SIR HENRY,—Dr. M'CLOUD will write to you a *true* account of the journal. I have advised him to be open and candid on the subject, and I feel it my duty myself to tell you that no number appears without its receiving my sanction, and often very important assistance from me. Perhaps your ingenious and comprehensive mind could contrive some mode by which Dr. RODERICK could *appear* no longer to be the editor, otherwise he will be ruined at *St. George's*. There is a party there who hate its very name, and take every opportunity of saying it is filled with falsehoods and inconsistencies, and making most cruel comparisons respecting it.

"I am happy to be able to inform you that I have at last succeeded in procuring an introduction to Mr. SPRING RICE, but for mercy's sake do not breathe what I am going to tell you. I have been introduced to him as an ultra-liberal, by my friend at Holland House; my brother's sentiments also being well known to him, he received me courteously, and I was satisfied with paving the way to get him to see Dr. CHAMBERS, and referring to Dr. C. for a knowledge of all matters in Pall Mall East. By assuming the character of a Whig, the CHANCELLOR of the EXCHEQUER will be cautioned against placing implicit faith in the Radical party, and by way of keeping up the ball, CHAMBERS will get Dr. ROGET an interview, who, as you know, will be happy to do anything that you tell him, and I think could easily contrive to induce Mr. SPRING RICE to confer with *you* as the head of the profession. By thus advancing step by step, from Radicalism to Whiggism, and from Whiggism to high Toryism, I am not without hope of doing some good. To me it is evident that SPRING RICE may be *turned round* considerably if he be not kept steady by WARBURTON and his tail, in which I understand there are upwards of eighty vertebræ. I always recollect with great anxiety that it was on the very question of University education, that Sir ROBERT PEEL was left in his worst minority last session. Your respectful and obliged

"Saville-row. B. B."

"(*Confidential.*)

"SIR HENRY,—In obedience to your commands I hasten to give you a plain but honest statement of all that regards our Journal, which indeed I would cheerfully have done yesterday, but I had not leisure, as we are obliged always to go to press on Fridays, immediately after we have seen THE LANCET; which, although I always keep a man waiting at the door of the office, with instructions to bring me a copy the moment it is out, we are seldom able to procure before ONE O'CLOCK on that day. To save time, I always have it conveyed to the printing-office in Skinner-street, which is nearer to THE LANCET office than Henrietta-street, and where either myself or an assistant fabricator constantly sits on Friday mornings awaiting its arrival, and correcting proofs by way of pastime. I mean 'pastime' *by comparison* only, for I assure you that the manufacture of the journal is downright hard work, and occupies no end of time. Indeed, you can form no idea of the extent of labour the journal gives me, most of the contributors and correspondents being unable to write even a sentence in their own language fit for press, although several of them, as you know, are, like yourself, eminent classical scholars.

"Ever since the commencement of the journal my editorial functions have been fraught with difficulties, vexations, and mortifications, in the highest degree; and in many instances I have found it impossible to perform my duties with justice, candour, and sincerity, and far less with truth; while the falling of the *subscriptions* have not only disappointed me, but put me to great personal inconvenience. Your high position in the profession justly demands that I should be to you full and explicit. You were, besides, one of our most punctual subscribers, and if you have not been able to write yourself, you have, at least, done all you could to get us contributions.

"Taking a retrospective view of the journal for the last twelve months, I fear you will not think it has improved in any respect, either in matter or circulation. Our endeavours to *force* the sale have not quite answered Messrs. Longman's expectations as booksellers, nor ours as editors. A very great proportion of the copies are distributed gratis, especially at the hospitals. Yet I have always made it a rule, when anything of an *extra* quality has appeared in it, to take the opportunity of giving it an *extra* push, and also to distribute gratuitously an *extra* number of copies, particularly at St. George's, where we have things still very much our own way. Longman's people are content still to go on with it, so as to give it a "fair trial," as their own advertisements cover the loss by sale, for they can charge all their authors the same as

though the books were advertised in a journal of large circulation.

"There were so many conflicting interests embarked in the work when it first started, that I never expected to please all of them. The St. Thomas's and Guy's people were exorbitant in their demands for room, but their puffs could not be admitted wholesale. Therefore it is better that they should have branched off, and published their own *successful* cases as a *separate* work. Indeed, I never could get on with TRAVERS; his wants were too large, and he has so much 'constitutional irritation,' that, like Sir JAMES M'GREGOR with Mr. GUTHRIE, I was 'afraid' of him. The St. Bartholomew, Middlesex, and King's College men I have made use of occasionally; but the whole machinery—at least all the great wheels of the journal—have been the *elite* of St. George's. Dr. CHAMBERS, ever since he tried the lecturing, in conjunction with me, has stood by me, and lent me his assistance on all occasions. He is my adviser, and I may say my *director* in all that I write connected with the College in Pall Mall. Being only a Licentiate myself, I never could write in unison with the feelings and sentiments of the Fellows, without one of them to guide me. In Dr. CHAMBERS I have found, I am happy to say, a most zealous coadjutor in all College matters, and I take this opportunity of assuring you that the unworthy accusation that Dr. CHAMBERS wished to reform the College *is false*. Rely upon it that there is no one more anxious to preserve the venerable, or, as some have impertinently called it, the *antiquated* institution, in all its purity, and with all its vested rights and privileges! He appears convinced that in order to do so effectually, there must be amongst the Fellows some *mock-reformers*—some men whom they can trust not to go too far, even in *talking*—and you got great credit last year, when Sir ROBERT PEEL empowered you to reform the College, to ask CHAMBERS to bring forward a plan which you knew well he neither could nor would do, thus throwing all the *onus*, when the clamorous radicals complained that nothing had been done, off your own shoulders. No one but yourself can do these things half so well.

"Whilst CHAMBERS guides me in all matters touching physicians, I have in BRODIE an exceedingly wise, cautious, and long-sighted guide, in writing every thing relating to the surgeons, who, like you, has not pledged himself to any particular political creed. He can approach, without any one suspecting his sincerity, either ultra-Tories, liberal Tories, ultra and liberal Whigs, or Radicals. Sir G. KNIGHTON and yourself well know that he can intrigue sufficiently with the Conservatives. Amongst the Whigs he has several friends, and one of them Lord B——, of whose acquaintance he has repeatedly taken advantage; and then, also, his brother, the M.P. and bookseller at Salisbury, uses his interest for Sir BENJAMIN with the Radicals; and he has also at his command a powerful interest among the Dissenters, through Lady BRODIE. He is, indeed, truly a *Methodist* in all his ways. I have often had to regret being under the necessity of publishing so many of the worthy baronet's clinicals, and I never could convince him that his lectures were published in THE LANCET to ridicule him, and show the stuff which the *pure* surgeons talk to their pupils, and their great imperfections as literary compositions.

"Permit me to say that your remarks on the subject of his lecture on operations were not exactly correct. His observations were not directed against the cutting and carving at the Westminster and some other hospitals, nor, indeed, *against* any of our pure friends. On the contrary, they were designed to remove some odium which had fallen on BABINGTON at St. George's, for *not* operating. BABINGTON, either through ignorance or incompetence, or timidity, had avoided using the knife in a case, and every body in the hospital said that he was letting the man die by inches, when he could have put an end to him in a minute on the operation table, or some good surgeon might have saved him there. This outcry it was thought could only be checked by the authority of BRODIE himself, who accordingly promised to devote part of a clinical lecture to an address *against* operations, and THE LANCET was so kind to BABINGTON, as a rising young man who should not be crushed in the outset of his career, as to give insertion to what BRODIE said. That is the whole of the matter, which I admit was rather mysterious without this explanation.

"I could not refuse inserting SEYMOUR's articles on *Reform*, as they were done at your own suggestions, but they were terrible effusions, and they did the Journal harm. SEYMOUR, indeed, is very much fallen. He was in some repute while he talked of 'Reform' and of 'liberalizing' the College, but after you whirled him over to a right and legitimate way of talking, and made him believe that you were to be his patron, and to recommend patients to him, he became rational. Yet since he has discovered that you had accomplished what you wanted in getting him over, and that you have since taken no notice of him, he is quite chop-fallen. But your good sense and discretion, and your objects in all this, are praiseworthy, and duly appreciated by all true men in the College.

"I have been at considerable loss for a common-sense *hack* to assist me in the Journal, but I can find none who have either discretion or talents; but I employ several occasionally. Dr. CLENDINNING is altogether with us, having quite left the enemy,

and would be glad to write leaders, but after his evidence before the Parliamentary Committee, his name in that capacity would do us no good. MARSHALL HALL too has been coquetting to come over again, and the paltry and shuffling creature has actually sent us some more of his puffs of himself, even after what we said of him when we sent him about his business a year or two ago.

"LOCOCK the man-midwife helps us a good deal. I hear he is going to change his awkward name. GUTHRIE would give us a shot every week, if I would allow him, but he fires his vagaries too wide of the mark, when he *does* fire. EARLE I find egotizes too much. With him, it is all 'me' and '*our* hospital.' He is quite an emetic; but he is very zealous in our cause, though rather too bitter and spiteful. FERGUSON, HOPE, WILLIAMS, and all the young fry, are glad to take up the pen when I choose to employ them, but I am obliged to be cautious, and I have often more trouble in correcting their MSS. than in composing my own original matter.

"I ought not to omit mentioning to you how much we are indebted to the important services of Dr. ROBERT LEE. By an extreme devotion to our interests, he has, on many occasions, succeeded in finding out what was going on in the camp of the enemy, being courageous enough to resort to means which even endangered his character and reputation. For these invaluable services we have rewarded him by appointing him as a lecturer in our hospital school, which, though not a profitable thing, at least shows our gratitude towards him, and I have also occasionally permitted him to write a little in our journal.

"We three,—I mean CHAMBERS, BRODIE, and MYSELF,—meeting daily at St. George's, excellent opportunities occur to us for concocting, digesting, arranging, and preparing our articles. I understand, from Dr. CHAMBERS, that you have been surprised, and even offended, at my frequent endeavours to make it appear that I was no longer the Editor of the *Gazette*, my having attempted to do so having injured the journal, as it looked as if I was ashamed of the concern. But the fact is, that the editorship has been, as you full well know, very injurious to my reputation; and, had it not been for the subscriptions, trifling as they were, and a promise of St. George's from BRODIE and CHAMBERS, I would have given it up in reality long ago. Moreover, it is considered indecorous in a physician of St. George's to *appear* in it. Indeed, last summer, when the violent disputes took place about the appointment of Mr. CUTLER, and it was likely to be discussed at the weekly Board, it was unavoidable for me to disclaim being the Editor, as I should have been held responsible at the hospital for the insertion of the letters, written by our lawyer, signed 'A Governor. The *ruse* succeeded at the time; and in order to clench the impression that I really was not then the Editor, I seized the opportunity to send to myself, as Editor, in my *own name*, some 'Rough Leaves from my Note-book at St. George's,' which, as you must have seen, I duly published. It is difficult, however, for me to divest the minds of our correspondents of their ancient impressions; and, consequently, communications came addressed personally to me, and people sometimes bring articles in their hands, asking me to insert them in the journal; but I have long had in pay an Irishman, of the name of CUMMING, who jobs for me, and whenever an application of this kind is made, I say, 'Well, I'll send it to Dr. CUMMING, and he can do what he likes about it.'

"We are indebted to him also for his countryman, CLENDINNING, turning round.

"It is reported that you do not intend giving any College dinners this season, in consequence of the secrets of the College getting abroad at them. Would you wish me to notice this? Please also to let me know what I am to say about the College conversations this year, and if you have any paper for them. Pray, also, instruct me how to allude to the revolutionary subject of reform, and say in what light I should notice the New Metropolitan humbug, so as to best suit the interests of the journal, the subject now being unavoidable. Please to inform me also if you wish the last oration to be revived. It is an admirable specimen of classical taste and high moral sentiments. A favourable review might help the sale, though I have no doubt it will soon come to a second edition.

"Before concluding this letter, permit me to express the high gratification which it affords me at all times, more particularly on an occasion like the present, to address a letter to you,—the individual to whom the whole body of the medical profession look up as to its head, and whose unequalled moral endowments have contributed to elevate the College of Physicians in the opinion of all thinking and good men. May I express a hope that you will, on all occasions, command my humble services in the journal, and that you will always believe me your very obedient humble servant,

"R. Mc. C.

"Henrietta-street, Saturday.

"P. S. With regard to the subject mentioned in your note to Dr. MAC M., I am happy to say that the lancet-case has been found in Pitt-street. I have thought it right to suppress a very bright account of it which came to hand. Dr. CHAMBERS says we must cherish a *Fellow*-feeling on such occasions."

NOTE FROM PROFESSOR RITCHIE.

To the Editor of THE LANCET.

SIR,—I beg you will have the kindness to correct a mistake you have committed in mentioning my name in reference to *King's College*, and the answer said to have been given to me by the *Professors*, when I offered myself as a candidate for the Chair of Natural Philosophy. The fact is simply this. Before any of the professors had been elected I offered myself as a candidate, and when the Secretary informed me that I was not eligible, as belonging to the Established Church of Scotland, I immediately withdrew my application. I am, Sir, your most obedient servant, WILLIAM RITCHIE.

38, Devonshire-street, Jan. 25th, 1836.

WESTMINSTER MEDICAL SOCIETY.

Saturday, Jan. 16, 1836.

Mr. RICHARD QUAIN in the Chair.

MEDICAL MAGNETISM.

THE minutes of the last meeting having been read over and confirmed,

Dr. JOHNSON proposed, that as Dr. Ritchie, in accordance with a request which had been conveyed to him from the Society, was, with much kindness, in attendance this evening with his apparatus, in order to make a statement of his views upon the subject of magnetism, the subject should be immediately discussed. (The motion having been seconded by Mr. H. THOMPSON, was put from the chair, and unanimously carried.)

Dr. RITCHIE—Mr. President and Gentlemen, the first time I had the honour of entering your Society, I came with the express intention of gaining information on a most important subject, namely, that of magnetism. I came, of course, without the remotest intention of controverting the views of Dr. Schmidt, of which I was entirely ignorant; and you are all aware of the circumstances which have led to the protraction of this discussion, which I confess, had I foreseen, I should have engaged in with extreme reluctance. Though I am much accustomed to speak in public, yet this is almost the first time I have had to address a medical society on a topic of this description, and I purpose confining myself strictly to my own department of the subject.

Without, then, alluding to Dr. Schmidt's opinions, which might excite unpleasant feelings, I shall at once place before the Society those views which I consider to be correct on the points in dispute, when the Society, having both opinions before them, will judge for themselves what notions they ought to entertain thereon.

Gentlemen, magnetism is produced entirely by electricity. We know of no agent except electricity that is capable of producing magnetism. It is owing to the electricity which exists in soft iron or steel that magnetism is produced. You might at first suppose, that as the earth is capable of producing magnetism, our globe exerts some peculiar quality which is not of an electric nature; but I think, from the late discoveries which have been made, that there can be no doubt that the earth owes its magnetism entirely to electricity. We, therefore, look to the earth as the producer of that electricity in masses of soft iron and steel, which constitutes magnetism. It appears now to be almost certain that an elastic fluid called "ether" pervades all space, and, in all probability, magnetism results from changes in that fluid, and electricity exists not only in iron and in steel, but in brass and all other substances, but, very likely, in different proportions. If, by any contrivance, we can decompose this etherous or electric fluid, which is now generally supposed to consist of two ingredients, each having a powerful attraction for the other, whilst particles of the same kind naturally repel each other, we shall produce either electric or magnetic effects. If we separate the particles to a considerable distance, we have the effects of common electricity. If they be confined to small intervals, they produce magnetism. Nothing therefore passes, when we induce magnetism in a piece of soft iron, nor do es any thing pass from a magnet to a wire when we induce electricity in that wire. —Dr. Ritchie here proceeded to explain the nature of the "poles" of the magnet, and the causes by which one repels and the other attracts, and how the different kinds of polarity are produced. But although we have before us a verbatim report of his remarks, the whole of which we designed to publish, we find it impossible, in the absence of illustrations which cannot here be given, to afford our readers those materials which will enable them fully to comprehend the somewhat intricate subject. This does not arise from any incompleteness of his demonstrations on the part of the learned professor, whose statements, when exhibiting the apparatus, were most lucid and forcible. The obstacles arise purely from the difficulty which necessarily attends the reporting of demonstrative discourses. The learned Doctor concluded one part of his discourse, by showing, as regards the making of magnets, that "the pole which is marked a north pole, does produce one kind of pole at the one end of this piece of iron, and another at the other; and these two poles are exactly of the same strength. Therefore it is not of the slightest consequence whether you employ a north

pole in producing a south pole, or a south pole in producing a north pole—they are infallibly the same." He then proceeded to make some remarks on the magnetism of the earth, which he said had been proposed to be employed for the cure of disease. Des Cartes himself considered that currents or vortices of magnetic fluid circulated round the earth, from pole to pole. If those currents existed, they must pass through our bodies and produce certain effects. But it is clear, I think, said Dr. R., from the researches of Dr. Faraday,—of whose discoveries it is impossible to speak in sufficiently high terms, and to which the discoveries of Sir Humphrey Davy bear no proportion,—that there are no such currents of electricity passing from north to south, but that the whole phenomena of magnetism are the result of a mere arrangement of particles, the rapidity of their operation, or the rapidity with which the arrangement ceases to exist. The learned professer then tried the effect of such an arrangement on a freely suspended magnet, and demonstrated the experiment of O'Ersted of Copenhagen, connecting the ends of the voltaic battery by means of a wire, from which he adduced the fact that the needle would place itself north and south, in obedience to the arrangement.

Having pointed out several other leading facts in magnetism, he explained the mode of producing voltaic electricity in a magnet properly arranged. In short, he suggested that by means of the magnet we might soon, perhaps, produce all that the battery itself is capable of producing; a result which would be owing to the discoveries of Dr. Faraday. Dr. Ritchie subsequently alluded to the physiological effects of electricity, and the only one which he would allow was that of the sudden concussion given to the system by electricity. There are, he observed, a great many confused ideas on this subject. When a shock is received from a voltaic battery, the person supposes that something passes from the battery through his body; but it is not from the electricity in the apparatus, but from that within ourselves, that the shock is experienced. It is by our own heat that we are warmed. We see by the light in our own eyes. We hear from the air in our ears. When we hear the ringing of a bell, nothing passes from that bell into our ear; no light passes from the sun into our eye. The electricity existing in all bodies is in a state of stable equilibrium. If we disturb that equilibrium, the sensation of a shock occurs. Once disturbed, the electricity in the body may continue in its new state for some time. We may retain our hold of the poles of a galvanic battery for a considerable period after the shock is received, without receiving new shocks, or a new disturbance of the equilibrium. When forced out of its natural position, we get a shock, and when it returns to its natural position we experience another, but the two are not equal in intensity, because we force the electricity more rapidly from its stable equilibrium than it returns; therefore the first shock is always the most violent. As you are all aware, since the discovery of electricity, the application of it to medical purposes has been a question of great interest, and its history in this respect is, perhaps, the most curious that could be perused. At one time its effect was described to be so great, that medical men thought they had almost got possession of an universal remedy. A few years afterwards the good effects were much doubted, and beyond all question the first accounts were greatly exaggerated. When the condition of the human body is thrown into a new state, no doubt a certain effect, good or bad, is produced. It very often happens, I believe, that a good effect results from electricity; but it also happens that bad results will take place, especially when we employ too large batteries. Perhaps I can speak with more experience on this point than any other person, for I believe I received a more powerful shock than any man alive, from a battery composed of sixteen large jars, each jar being nearly as large as those that are usually to be seen in an apothecary's window. The effect of that shock was very unlike the effect from a shock of common electricity. I can compare it with nothing except what I conceive would be the effect of a nearly spent cannon ball striking the elbow, and just wanting power enough to carry the arm off; such a shock cannot but be attended with serious consequences. I felt its effect for several weeks. The electricity of my body had been thrown into such a rapid state of motion, that for several nights afterwards I felt as if the whole of the nervous system was in a rapid vibration. In fact, electricity, when highly accumulated, is not an agent to be played with. If, however, we apply it in small doses, and keep the part affected, under its influence for a certain length of time, we may produce, amongst other effects, warmth of the parts (for it is an universal law, that whenever a conductor is connected with the poles of a voltaic battery, the temperature is always raised), and an increase of circulation. If we take a bundle of narrow tubes, and fill them with liquid, just running over, it will flow in a continuous stream when a current of common electricity is made to pass through them in any direction, and electricity will produce this in the capillary tubes of the body, from which beneficial effects may result. Instead, therefore, of throwing cold water on the proposal to employ magnetism in the cure of disease, the subject should receive further attention and investigation. By magnetism we can produce more varied

effects than by any agent with which we are acquainted. We scarcely, in fact, yet know any of the *uses* of electricity. The only use of the magnet we know is its pointing to the north; and with voltaic electricity we merely decompose substances, and only very partially. The philosopher, then, should try to discover the uses of electricity in diseases, or otherwise. Respecting the apparatus I have got here, those who choose are at liberty to try its effects. The shock to be given depends very much on the length of the wire which may be employed. With a short wire the spark will be pretty bright, but productive of scarcely any physiological effect. With a very long wire the spark will be exceedingly feeble, and the physiological effect very powerful. With regard to the subject immediately under discussion, I can only say that, as we are all engaged in the same great search for truth, if in any respect I can be shown to be wrong, I will most willingly adopt more correct views. It is only within the last three years, for instance, and since I came to the *London University*, that I was satisfied that particles of light did not come from the sun. No imputation can justly fall upon us for correcting our views. I wish we could treat political questions upon the same principle, so that the ordinary and domestic affairs of life might not be interfered with by our notions on those subjects, and that a man, when he obtained more correct views of political questions, might adopt them without being subjected to the reproach of being a "turncoat." If the discussion here is sufficient to induce medical men to turn more of their attention to the important subject debated, I shall rejoice at having helped to add to the interest of a science, which, I assure you, I have most warmly at heart. (Much applause followed the remarks of the learned professor as he resumed his seat.)

Dr. SCHMIDT said that, until he adopted his present views of magnetism, he had entertained those explained by Dr. Ritchie. Dr. Schmidt then explained some of his views in answer to those of Dr. Ritchie which we have not reported, and the whole of which, therefore, we omit,—with less regret, indeed, from the circumstance, that they would not form a useful portion of a medical report. He asked, however, why Dr. Ritchie said that we, as yet, knew but very little of electricity and magnetism, and yet argued that it was impossible that magnetism should produce any physiological effects. Opportunity, he (Dr. S.) thought, was only wanted to follow out ideas on the subject. He was only desirous of having the merits of the magnet tried as a remedial agent. If Dr. Ritchie would at any time do him the favour of joining him in an examination into all the circumstances of the production and power of his magnets, he would be most happy to adopt Dr. R.'s views, and publicly acknowledge his error, provided ground were shown to him for the change.

Dr. RITCHIE said that he considered that, with one or two very slight exceptions, Dr. Schmidt and himself after all entertained nearly the same opinions. Dr. Schmidt had certainly stated nothing that was not before very well known. He should be happy, at any time most convenient to Dr. Schmidt, to meet him, to explain and hear explanations, and to afford him the use of all his apparatus at the University; and if he (Dr. S.) could convince him (Dr. R.) in the end that he was wrong upon any one point, he would most readily acknowledge it.

Mr. BIRD stated that he had tried various experiments upon the human body with an electro-magnet which he possessed, but that all his experiments produced the same results, whether the electro-magnet was connected with the battery or not.

The thanks of the Society were then presented, by a general vote, to Dr. Ritchie for his attendance this evening, and for the very lucid, able, and highly satisfactory statement he had made. On a suggestion that "both the experimentalists should be included in the vote," the PRESIDENT observed that there was a rule of the Society which prevented this course being pursued with respect to any of its own members, and that Dr. Schmidt had been admitted a member that night. The Society was then adjourned.

NORTH-LONDON HOSPITAL.

THE first annual report of this establishment has just been issued. The hospital was opened for the reception of patients on the 1st of November 1834, and the books show from that time up to November 1st, 1835, the following list:—In-patients admitted, 1156; out-patients, 1299; casualties relieved, 1064; lying-in women attended at their own habitations, 270: total 3789.

The patients who have died in the hospital during the year amount to 90; in-patients remaining at the date of the report, 123. The hospital now contains 130 beds. A loan of 2500*l.* has supplied the deficiency in the sums required to defray the whole cost of the present building and outfit, which amounted to 7670*l.*, of which sum 5170*l.* were raised by subscriptions. The Committee propose to liquidate the debt and enlarge the hospital by establishing a building fund, a foundation for which has been made by Mr. Henry Philip Hope, of Connaught-place; who, in addition to other donations, has placed at the disposal of the Committee the sum of 200*l.* for this purpose.

Although the ordinary expenditure of the first year has been greater than will be in

future required to support the hospital in its present extent, yet the receipts arising from the fees paid by students (devoted by the medical officers to the support of the patients), and the contributions at the Anniversary Dinner in May last, have been such as to leave a small balance on the twelve-months, in the hands of the treasurer. The following are condensed statements of the accounts:—

Receipts and Expenditure from June 1832 to October 31, 1834.

	£	s.	d.
Donations and Collections at Churches	4366	11	6
Profits of a Bazaar in the Regent's Park, in June 1834	502	3	0
Dividend on Consols	1	12	9
Donation for Investment, by W. L. D.	100	0	0
Queen Caroline Fund	1200	0	0
	£6170	7	3

	£	s.	d.
Paid to Builders and Architect	5176	3	9
Salaries and Wages	307	15	8
Advertisements, Printing, Stationery, Postage, Porterage, Incidental charges, &c.	365	19	8
Investment in 3 per cent. Cons.	100	0	0
Balance in Treasurer's hands	280	8	2
	£6170	7	3

Receipts and Expenditure from Oct. 31, 1834, to Oct. 31, 1835.

	£	s.	d.
Balance in hand	280	8	2
Loan at 4½ per cent.	2500	0	0
Fund raised for the projected Eastern Fever Hospital, transferred by Donors	52	10	0
Collection at Church	65	0	0
Bequest of Colonel Sackville	31	10	0
A Third of the Profits derived from the Colosseum Fête	188	0	0
A second Donation for Investment, by W. L. D.	100	0	0
Dividends on Consols	4	17	11
Donations, Collections, &c.	1991	13	3
Annual Subscriptions	256	3	0
Fees paid by Students for attending the Practice during the Session 1834-35	3130	1	0
	£8600	3	4

	£	s.	d.
Balance paid to Builders	2677	17	5
Furniture, Fittings, & Repairs	1841	3	0
Pharmaceutical Fittings and Apparatus	69	4	2
Surgical Instruments, Splints, &c.	131	8	0
Advertisements, Printing, Stationery, Case-Books, Postage, Porterage, &c. &c.	284	12	0½
Meat, Bread, Milk, Groceries, Rice, Meal, Stores, Vegetables, Cheese, Candles, Soap, &c.	1278	13	11
Coal, Coke, and Wood	215	5	11
Wine and Spirits	64	15	10
Beer and Porter	148	7	2½
Patients' extra Diets	33	6	0
Bandages, Linen, &c.	49	7	1
Washing	179	2	5
Incidental charges	84	0	1
Salaries, Wages, &c.	674	14	5
Drugs, Lint, Tow, Plaster, &c.	447	18	4
Spirits of Wine	29	5	9
Leeches	32	0	0
Burial Expenses, Insurance, Water Rates, Gas	28	8	6
Guarantee to R. Liston, Esq.	156	10	0
Interest on Loan	56	5	0
Investment in 3 per cent. Cons.	100	0	0
Balance in Treasurer's hands	17	8	3
	£8600	3	4

To the Editor of THE LANCET.

SIR,—Dr. Macleod having repeatedly libelled Dr. Cummin, a lecturer at the Aldersgate-Street School of Medicine, by giving circulation to a report that Dr. Cummin was the assistant editor of the Medical Gazette, it was resolved by some of the students of the school to inquire of Dr. Cummin, after his lecture on Wednesday last, whether that statement was true. The design was accordingly carried into execution on that occasion, the impression being very strong, that neither the slanderer of the students at their late meeting, nor any person so intimately connected with the slanderer, ought to continue any longer secret in the person of Dr. Cummin, if the libel were true. It is but justice to Dr. Cummin to make known in your Journal, that his reply to the questions put to him on Wednesday was, that he neither was the author of the slandering article, nor could have prevented its insertion in the periodical in question, nor was connected in any way, directly or indirectly, with the editing, the management, or the production of the *Medical Gazette*. I am, Sir, your obedient servant,

AN ATTENDANT AT THE ALDERSGATE-STREET SCHOOL.

Jan. 27, 1836.

CORRESPONDENTS.

To the Editor.—Sir,—In your report of the proceedings of the Meeting which took place at the Crown and Anchor on Monday evening the 18th of January, a short speech is attributed to "Dr. —— BLUNDELL." Will you allow me to state, that as I

was not present on that occasion, the address in question was not spoken by me. I have the honour to be, Sir, your obedient servant,

THOMAS LEIGH BLUNDELL.

39, Lombard-street, Jan. 23, 1836.

A Hospital Pupil, Glasgow, must be more explicit. Before publishing any statement on the subject, we must know the names of the offenders and the aggrieved, and the letter must be confidentially authenticated.

However widely the medical gentlemen have differed, they must all have denied the truth of the impressions stated in *Gamma's* letter. The details described therein were not "new," but *impossible*. We can express no other opinion on the case than that already given; and the treatment can be directed with propriety only after a personal interview with any medical gentleman who may undertake to prescribe for the afflicted patient.

Mr. Matthews.—The wax model was a section of the skull, showing the ganglion oticum, with its branches, and the tympanum, published by Mr. Schloss.

We shall feel much indebted to any of our readers who will take the trouble to inform us, by letter (addressed personally to the Editor), of the names and places of residence of such medical men as they know to occupy the office of Coroner in any part of these kingdoms, whether for towns or counties, and whether living near to, or at a distance from, our correspondents, with the dates (or not) of their appointment.

Does *Mr. Broackes* desire that his letter should be published? Of course we cannot undertake to call upon the three parties whom Mr. Broackes has named. The bare reference to those parties proves the truth and accuracy of our brief critical notice. If the statements in the book be satisfactory, whence the necessity for the collateral aid? We have examined the work again, and are now ashamed of the lenity of our first notice. If we have acted unjustly, it certainly is not to Mr. Broackes, but to the profession and the public. If Mr. B. is not contented, we shall have much more to say on the subject; but we hope the book is shelved.

The letter respecting the Dorsetshire Medical Association, would be charged as an advertisement at the Stamp Office. A passage from it, however, showing the objects of the Institution, will be inserted in the next week's LANCET.

The particulars of the meetings at St. Thomas's Hospital and the London University have been laid before us. At the one, nine students in thirty-four, and at the other seven students in four hundred, have put their hands to documents declaring that the Apothecaries' Company is the pink of British medical institutions. The St. Thomas's students are said to have declared the same thing in writing at King's College, previous to their sail down the river from the Strand to the Borough.

The facts stated by *Investigator* shall be published, but it is impossible to find a place for them this week.

It would be better to lay the plan for the "Student's Association," which has been sent to us, before a meeting of the gentlemen who are interested in its adoption or rejection. The communication of our correspondent may therefore be obtained from the publisher.

The report from the Royal Institution will appear next week.

R. R., Jewin-street.—Time fails us for an epistle. Unless the want is urgent, it would be both economy and good policy to wait.

Mr. Bateman.—1. No farther portion has yet been issued. When it appears, our analysis and comments may be resumed.—2. The means of conclusion have not yet been afforded us by the only party who can supply them.—3. Most probably they will.

Mr. Baxter's case has reached us.

The letters of *Mr. H. Prater*, *Mr. Samuel*, *Mr. Evett*, *Dr. Kelso*, *Dr. Wm. Fergusson*, *George F.* (part), *A Pupil of the Borough Hospitals*, *A Member of the Royal College of Surgeons* (part), *Anti-Humbug* (part), *A King's College Medical Student*, *A Licentiate of the Apothecaries' Company*, and *H.*, are intended for insertion.

We have received a letter from *Mr. Meade*, the Chairman of the late meeting at the *Crown and Anchor Tavern*, stating that several untruths appeared respecting him in Dr. Macleod's journal of last week. The space which would be occupied by Mr. Meade's letter in our columns, would be ill-bestowed on the fabricator of Messrs. Longman's periodical; and we therefore hope that Mr. M. will be satisfied with the above statement relative to its contents.

The report from *St. George's* is necessarily postponed for a week.

Observator requests us to state that his reply to the "direct contradiction" given by Messrs. Crampton, Colles, and Carmichael, to his statement relative to the appointment of Mr. Adams to the Richmond Hospital, will be forwarded in time for publication in the next number of THE LANCET.

A Student, G. St.—One of Mr. Liston's excellent clinical lectures will appear in our next number.

A Surgeon—We have other reports of Dr. Wallace's admirable clinique before us ready for publication.

The statements of *Mr. Sopwith* in reply to Mr. Way, are unavoidably omitted this week.

A Subscriber should endeavour to obtain the information from Dr. A. himself.

ERRATA.—In Dr. Sigmond's paper, page 635, line 27, for *lomibuens*, read *combuens*; line 29, for *rubracea*, read *rubricea*.